

J E S 2 J O B L O G

13.38.57 JOB 958 \$HASP373 COBUCL7 STARTED - INIT 1 - CLASS A - SYS HMVS
13.38.57 JOB 958 IEF403I COBUCL7 - STARTED - TIME=13.38.57
13.38.57 JOB 958 IEFACRT COB /IKFCBL00/00:00:00.18/00:00:00.25/00004/COBUCL7
13.38.57 JOB 958 IEC130I SYSLIB DD STATEMENT MISSING
13.38.57 JOB 958 IEFACRT COB /IKFCBL00/00:00:00.06/00:00:00.10/00000/COBUCL7
13.38.57 JOB 958 IEFACRT ASM /IFOX00 /00:00:00.13/00:00:00.18/00000/COBUCL7
13.38.57 JOB 958 IEFACRT LKED /IEWL /00:00:00.05/00:00:00.08/00000/COBUCL7
13.38.57 JOB 958 SE 'COBUCL7 (J 958)- COBUC .COB ENDED, CODE 0004, 21.363 13:38:57',USER=(JAY01), LOGON
13.38.57 JOB 958 SE 'COBUCL7 (J 958)- COBUC .COB ENDED, CODE 0000, 21.363 13:38:57',USER=(JAY01), LOGON
13.38.57 JOB 958 SE 'COBUCL7 (J 958)- ASMXCL .ASM ENDED, CODE 0000, 21.363 13:38:57',USER=(JAY01), LOGON
13.38.57 JOB 958 SE 'COBUCL7 (J 958)- ASMXCL .LKED ENDED, CODE 0000, 21.363 13:38:57',USER=(JAY01), LOGON
13.38.57 JOB 958 IEFACRT COMPCODE/COMPCODE/00:00:00.01/00:00:00.02/00000/COBUCL7
13.38.57 JOB 958 IEF404I COBUCL7 - ENDED - TIME=13.38.57
13.38.57 JOB 958 \$HASP395 COBUCL7 ENDED

----- JES2 JOB STATISTICS -----

29 DEC 21 JOB EXECUTION DATE

29 CARDS READ

2,208 SYSOUT PRINT RECORDS

0 SYSOUT PUNCH RECORDS

0.01 MINUTES EXECUTION TIME

1	//COBUCL7 JOB (001), 'COBOL COMPILE', CLASS=A, MSGCLASS=X	JOB 958
	***	00000200
	*** ***** *	00000300
	*** * COMPILE MAIN PROGRAM -VSUPDT- AND SUBPROGRAMS -SORTNAME- AND *	00000400
	*** * -Y2KGTOA- AND LINK INTO LOAD MODULE -VSUPDT- *	00000500
	*** ***** *	00000600
2	//COBUC EXEC COBUC, CPARM1='NODECK, LOAD, DMAP, SUPMAP, LIB'	00000700
3	XXCOBUC PROC CPARM1='DECK, NOLOAD, SUPMAP',	100010000
	XX CPARM2='SIZE=2048K, BUF=1024K'	00020000
4	XXCOB EXEC PGM=IKFCBL00, REGION=4096K,	00040000
	XX PARM='&CPARM1, &CPARM2'	00050000
5	XXSTEPLIB DD DSN=SYSC.LINKLIB, DISP=SHR	00051000
6	XXSYSPRINT DD SYSOUT=*	00060000
7	XXSYSPUNCH DD SYSOUT=B	00070000
8	XXSYSUT1 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00080000
9	XXSYSUT2 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00090000
10	XXSYSUT3 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00100000
11	XXSYSUT4 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00110000
12	//COB.SYSLIB DD DISP=SHR, DSN=SYSC.VSAMIO.SOURCE	00000800
13	//COB.SYSIN DD DISP=SHR, DSN=JAY01.ISAM.COBOL(VSUPDT)	00000900
14	//COB.SYSLIN DD DSN=&LOADSET, DISP=(MOD, PASS), UNIT=SYSDA,	00001000
	// SPACE=(80, (1000, 500))	00001100
15	//COBUC EXEC COBUC, CPARM1='NODECK, LOAD, DMAP, SUPMAP'	00001200
16	XXCOBUC PROC CPARM1='DECK, NOLOAD, SUPMAP',	100010000
	XX CPARM2='SIZE=2048K, BUF=1024K'	00020000
17	XXCOB EXEC PGM=IKFCBL00, REGION=4096K,	00040000
	XX PARM='&CPARM1, &CPARM2'	00050000
18	XXSTEPLIB DD DSN=SYSC.LINKLIB, DISP=SHR	00051000
19	XXSYSPRINT DD SYSOUT=*	00060000
20	XXSYSPUNCH DD SYSOUT=B	00070000
21	XXSYSUT1 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00080000
22	XXSYSUT2 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00090000
23	XXSYSUT3 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00100000
24	XXSYSUT4 DD UNIT=SYSDA, SPACE=(460, (700, 100))	00110000
25	//COB.SYSIN DD DISP=SHR, DSN=JAY01.ISAM.COBOL(SORTNAME)	00001300
26	//COB.SYSLIN DD DSN=&LOADSET, DISP=(MOD, PASS)	00001400
27	//ASMXCL EXEC ASMXCL, PARM.LKED=(XREF, LET, LIST),	00001500
	// MAC1='SYSC.Y2K.SOURCE'	00001600
28	XXASMXCL PROC MAC='SYS1.MACLIB', MAC1='SYS1.MACLIB'	00050000
29	XXASM EXEC PGM=IFOX00, PARM=OBJ, REGION=128K	00100000
30	XXSTEPLIB DD DSN=SYSC.LINKLIB, DISP=SHR	00110000
31	XXSYSLIB DD DSN=&MAC, DISP=SHR	00150000
32	XX DD DSN=&MAC1, DISP=SHR	00200000
33	XXSYSUT1 DD DSN=&&SYSUT1, UNIT=SYSSQ, SPACE=(1700, (600, 100)),	00250000
	XX SEP=(SYSLIB)	00300000
34	XXSYSUT2 DD DSN=&&SYSUT2, UNIT=SYSSQ, SPACE=(1700, (300, 50)),	00350000
	XX SEP=(SYSLIB, SYSUT1)	00400000
35	XXSYSUT3 DD DSN=&&SYSUT3, UNIT=SYSSQ, SPACE=(1700, (300, 50))	00450000
36	//ASM.SYSPRINT DD SYSOUT=*	00001700
	X/SYSPRINT DD SYSOUT=A, DCB=BLKSIZE=1089	00500000
37	XXSYSPUNCH DD SYSOUT=B	00550000
38	//ASM.SYSGO DD DSN=&LOADSET, DISP=(MOD, PASS)	00001800
	X/SYSGO DD DSN=&&OBJSET, UNIT=SYSSQ, SPACE=(80, (200, 50)),	00600000
	XX DISP=(MOD, PASS)	00650000
39	//ASM.SYSIN DD DISP=SHR, DSN=SYSC.Y2K.SOURCE(Y2KGTOA)	00001900
40	XXLKED EXEC PGM=IEWL, PARM=(XREF, LET, LIST, NCAL), REGION=128K,	00700000
	XX COND=(8, LT, ASM)	00750000
41	//LKED.SYSLIN DD DSN=&LOADSET	00002000
	X/SYSLIN DD DSN=&&OBJSET, DISP=(OLD, DELETE)	00800000
42	XX DD DDNAME=SYSIN	00850000
43	//LKED.SYSLMOD DD DISP=MOD, DSN=JAY01.LOAD <<-TARGET	00002100

	X/SYSLMOD	DD	DSN=&&GOSET(GO),UNIT=SYSDA,SPACE=(1024,(50,20,1)),	00900000
	XX		DISP=(MOD,PASS)	00950000
44	XXSYSUT1	DD	DSN=&&SYSUT1,UNIT=(SYSDA,SEP=(SYSLIN,SYSLMOD)),	01000000
	XX		SPACE=(1024,(50,20))	01050000
45	//LKED.SYSPRINT	DD	SYSOUT=*	00002200
	X/SYSPRINT	DD	SYSOUT=A	01100000
46	//LKED.SYSLIB	DD	DISP=SHR,DSN=SYSC.COBLIB	00002300
47	//	DD	DISP=SHR,DSN=SYSC.LINKLIB (FOR VSAMIO)	00002400
48	//LKED.SYSIN	DD	*	00002500
49	//COMPCODE	EXEC	PGM=COMPCODE,COND=EVEN,	00002700
	//		PARM='USER=(JAY01)'	00002800
50	//SYSPRINT	DD	SYSOUT=*	00002900

STMT NO. MESSAGE

4 IEF653I SUBSTITUTION JCL - PARM='NODECK,LOAD,DMAP,SUPMAP,LIB,SIZE=2048K,BUF=1024K'
 17 IEF653I SUBSTITUTION JCL - PARM='NODECK,LOAD,DMAP,SUPMAP,SIZE=2048K,BUF=1024K'
 31 IEF653I SUBSTITUTION JCL - DSN=SYS1.MACLIB,DISP=SHR
 32 IEF653I SUBSTITUTION JCL - DSN=SYSC.Y2K.SOURCE,DISP=SHR

IEF236I ALLOC. FOR COBUCL7 COB COBUC

IEF237I 253 ALLOCATED TO STEPLIB
 IEF237I 253 ALLOCATED TO SYS00416
 IEF237I JES2 ALLOCATED TO SYSPRINT
 IEF237I JES2 ALLOCATED TO SYSPUNCH
 IEF237I 380 ALLOCATED TO SYSUT1
 IEF237I 252 ALLOCATED TO SYSUT2
 IEF237I 370 ALLOCATED TO SYSUT3
 IEF237I 251 ALLOCATED TO SYSUT4
 IEF237I 253 ALLOCATED TO SYSLIB
 IEF237I 184 ALLOCATED TO SYSIN
 IEF237I 180 ALLOCATED TO SYS00418
 IEF237I 252 ALLOCATED TO SYSLIN

IEF142I COBUCL7 COB COBUC - STEP WAS EXECUTED - COND CODE 0004

IEF285I	SYSC.LINKLIB	KEPT	*-----0
IEF285I	VOL SER NOS= SYSCPK.		
IEF285I	UCSYSCPK	KEPT	*-----0
IEF285I	VOL SER NOS= SYSCPK.		
IEF285I	JES2.JOB00958.S00102	SYSOUT	
IEF285I	JES2.JOB00958.S00103	SYSOUT	
IEF285I	SYS21363.T133857.RA000.COBUC7.R0000001	DELETED	*-----6
IEF285I	VOL SER NOS= MVS380.		
IEF285I	SYS21363.T133857.RA000.COBUC7.R0000002	DELETED	*-----6
IEF285I	VOL SER NOS= WORK01.		
IEF285I	SYS21363.T133857.RA000.COBUC7.R0000003	DELETED	*-----12
IEF285I	VOL SER NOS= MVS370.		
IEF285I	SYS21363.T133857.RA000.COBUC7.R0000004	DELETED	*-----14
IEF285I	VOL SER NOS= WORK00.		
IEF285I	SYSC.VSAMIO.SOURCE	KEPT	*-----6
IEF285I	VOL SER NOS= SYSCPK.		
IEF285I	JAY01.ISAM.COBOL	KEPT	*-----4
IEF285I	VOL SER NOS= MVS381.		
IEF285I	UCPUB000	KEPT	*-----0
IEF285I	VOL SER NOS= PUB000.		
IEF285I	SYS21363.T133857.RA000.COBUC7.LOADSET	PASSED	*-----231
IEF285I	VOL SER NOS= WORK01.		

IEF373I STEP /COB / START 21363.1338

IEF374I STEP /COB / STOP 21363.1338 CPU 0MIN 00.15SEC SRB 0MIN 00.03SEC VIRT 2076K SYS 236K

**** JOB NAME: COBUCL7 JOBCARD READ 2021/363 13:38:57 370/148 VS2 R03.8 HMVS *****

* STEP NUMBER: 1 USER CORE: 2076K START TIME: 13:38:57 CPU TIME: 00:00:00.18 ACTIVE TIME: 00:00:00.21 *									
* STEP NAME: COB SYSTEM CORE: 236K STOP TIME: 13:38:57 SRB TIME: 00:00:00.03 ALLOC TIME: 13:38:57 *									
* PROGRAM NAME: IKFCBL00 REGION SIZE: 4096K ELAPSED TIME: 00:00:00.25 TCB TIME: 00:00:00.15 PROGRAM LOAD: 13:38:57 *									
* CONDITION CODE: 00004 PERFORMANCE GROUP: 004 *									
* JES2 CARDS: 0 SERVICE UNITS PAGES IN/OUT # SWAPS PAGES SWAP IN/OUT VIO PAGES IN/OUT *									
* 1,656 0 / 0 0 0 / 0 0 / 0 *									
* ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT *									
* 253/D3350 0 253/D3350 0 380/D3380 6 252/D3350 6 370/D3375 12 251/D3350 14 *									
* 253/D3350 6 184/D3380 4 180/D3380 0 252/D3350 231 *									

IEF236I ALLOC. FOR COBUCL7 COB COBUC

IEF237I 253 ALLOCATED TO STEPLIB
 IEF237I 253 ALLOCATED TO SYS00420
 IEF237I JES2 ALLOCATED TO SYSPRINT

IEF237I JES2 ALLOCATED TO SYSPUNCH
IEF237I 370 ALLOCATED TO SYSUT1
IEF237I 380 ALLOCATED TO SYSUT2
IEF237I 251 ALLOCATED TO SYSUT3
IEF237I 251 ALLOCATED TO SYSUT4
IEF237I 184 ALLOCATED TO SYSIN
IEF237I 180 ALLOCATED TO SYS00422
IEF237I 252 ALLOCATED TO SYSLIN
IEC130I SYSLIB DD STATEMENT MISSING
IEF142I COBUCL7 COB COBUC - STEP WAS EXECUTED - COND CODE 0000
IEF285I SYSC.LINKLIB KEPT *-----0
IEF285I VOL SER NOS= SYSCPK.
IEF285I UCSYSCPK KEPT *-----0
IEF285I VOL SER NOS= SYSCPK.
IEF285I JES2.JOB00958.S00104 SYSOUT
IEF285I JES2.JOB00958.S00105 SYSOUT
IEF285I SYS21363.T133857.RA000.COBUC7.R0000005 DELETED *-----6
IEF285I VOL SER NOS= MVS370.
IEF285I SYS21363.T133857.RA000.COBUC7.R0000006 DELETED *-----6
IEF285I VOL SER NOS= MVS380.
IEF285I SYS21363.T133857.RA000.COBUC7.R0000007 DELETED *-----9
IEF285I VOL SER NOS= WORK00.
IEF285I SYS21363.T133857.RA000.COBUC7.R0000008 DELETED *-----3
IEF285I VOL SER NOS= WORK00.
IEF285I JAY01.ISAM.COBOL KEPT *-----2
IEF285I VOL SER NOS= MVS381.
IEF285I UCPUB000 KEPT *-----0
IEF285I VOL SER NOS= PUB000.
IEF285I SYS21363.T133857.RA000.COBUC7.LOADSET PASSED *-----29
IEF285I VOL SER NOS= WORK01.
IEF373I STEP /COB / START 21363.1338
IEF374I STEP /COB / STOP 21363.1338 CPU 0MIN 00.04SEC SRB 0MIN 00.02SEC VIRT 2076K SYS 248K

* *
* STEP NUMBER: 2 USER CORE: 2076K START TIME: 13:38:57 CPU TIME: 00:00:00.06 ACTIVE TIME: 00:00:00.06 *
* STEP NAME: COB SYSTEM CORE: 248K STOP TIME: 13:38:57 SRB TIME: 00:00:00.02 ALLOC TIME: 13:38:57 *
* PROGRAM NAME: IKFCBL00 REGION SIZE: 4096K ELAPSED TIME: 00:00:00.10 TCB TIME: 00:00:00.04 PROGRAM LOAD: 13:38:57 *
* CONDITION CODE: 00000 PERFORMANCE GROUP: 004 *
* JES2 CARDS: 0 SERVICE UNITS PAGES IN/OUT # SWAPS PAGES SWAP IN/OUT VIO PAGES IN/OUT *
* 349 0 / 0 0 0 / 0 0 / 0 *
* *
* ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT *
* 253/D3350 0 253/D3350 0 370/D3375 6 380/D3380 6 251/D3350 9 251/D3350 3 *
* 184/D3380 2 180/D3380 0 252/D3350 29 *

IEF236I ALLOC. FOR COBUCL7 ASM ASMXCL
IEF237I 253 ALLOCATED TO STEPLIB
IEF237I 253 ALLOCATED TO SYS00424
IEF237I 150 ALLOCATED TO SYSLIB
IEF237I 253 ALLOCATED TO
IEF237I 370 ALLOCATED TO SYSUT1
IEF237I 380 ALLOCATED TO SYSUT2
IEF237I 251 ALLOCATED TO SYSUT3
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I JES2 ALLOCATED TO SYSPUNCH
IEF237I 252 ALLOCATED TO SYSGO
IEF237I 253 ALLOCATED TO SYSIN
IEF142I COBUCL7 ASM ASMXCL - STEP WAS EXECUTED - COND CODE 0000
IEF285I SYSC.LINKLIB KEPT *-----0
IEF285I VOL SER NOS= SYSCPK.
IEF285I UCSYSCPK KEPT *-----0

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IEF285I VOL SER NOS= SYSCPK.
IEF285I SYS1.MACLIB KEPT *-----18
IEF285I VOL SER NOS= MVSRES.
IEF285I SYSC.Y2K.SOURCE KEPT *-----4
IEF285I VOL SER NOS= SYSCPK.
IEF285I SYS21363.T133857.RA000.COBUCL7.SYSUT1 DELETED *-----247
IEF285I VOL SER NOS= MVS370.
IEF285I SYS21363.T133857.RA000.COBUCL7.SYSUT2 DELETED *-----63
IEF285I VOL SER NOS= MVS380.
IEF285I SYS21363.T133857.RA000.COBUCL7.SYSUT3 DELETED *-----18
IEF285I VOL SER NOS= WORK00.
IEF285I JES2.JOB00958.S00106 SYSOUT
IEF285I JES2.JOB00958.S00107 SYSOUT
IEF285I SYS21363.T133857.RA000.COBUCL7.LOADSET PASSED *-----16
IEF285I VOL SER NOS= WORK01.
IEF285I SYSC.Y2K.SOURCE KEPT *-----4
IEF285I VOL SER NOS= SYSCPK.
IEF373I STEP /ASM / START 21363.1338
IEF374I STEP /ASM / STOP 21363.1338 CPU 0MIN 00.12SEC SRB 0MIN 00.01SEC VIRT 128K SYS 192K
*****
*
* STEP NUMBER: 3 USER CORE: 128K START TIME: 13:38:57 CPU TIME: 00:00:00.13 ACTIVE TIME: 00:00:00.14 *
* STEP NAME: ASM SYSTEM CORE: 192K STOP TIME: 13:38:57 SRB TIME: 00:00:00.01 ALLOC TIME: 13:38:57 *
* PROGRAM NAME: IFOX00 REGION SIZE: 128K ELAPSED TIME: 00:00:00.18 TCB TIME: 00:00:00.12 PROGRAM LOAD: 13:38:57 *
* CONDITION CODE: 00000 PERFORMANCE GROUP: 004 *
* JES2 CARDS: 0 SERVICE UNITS PAGES IN/OUT # SWAPS PAGES SWAP IN/OUT VIO PAGES IN/OUT *
* 2,004 0 / 0 0 0 / 0 0 / 0 *
*
* ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT ADDR/UNIT I/O COUNT *
* 253/D3350 0 253/D3350 0 150/D3350 18 253/D3350 4 370/D3375 247 380/D3380 63 *
* 251/D3350 18 252/D3350 16 253/D3350 4 *
*****
IEF236I ALLOC. FOR COBUCL7 LKED ASMXCL
IEF237I 252 ALLOCATED TO SYSLIN
IEF237I JES2 ALLOCATED TO
IEF237I 180 ALLOCATED TO SYSLMOD
IEF237I 180 ALLOCATED TO SYS00426
IEF237I 370 ALLOCATED TO SYSUT1
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I 253 ALLOCATED TO SYSLIB
IEF237I 253 ALLOCATED TO
IEF237I 253 ALLOCATED TO SYS00428
IEF142I COBUCL7 LKED ASMXCL - STEP WAS EXECUTED - COND CODE 0000
IEF285I SYS21363.T133857.RA000.COBUCL7.LOADSET DELETED *-----277
IEF285I VOL SER NOS= WORK01.
IEF285I JES2.JOB00958.SI0101 SYSIN
IEF285I JAY01.LOAD KEPT *-----14
IEF285I VOL SER NOS= PUB000.
IEF285I UCPUB000 KEPT *-----0
IEF285I VOL SER NOS= PUB000.
IEF285I SYS21363.T133857.RA000.COBUCL7.SYSUT1 DELETED *-----0
IEF285I VOL SER NOS= MVS370.
IEF285I JES2.JOB00958.S00108 SYSOUT
IEF285I SYSC.COBLIB KEPT *-----37
IEF285I VOL SER NOS= SYSCPK.
IEF285I SYSC.LINKLIB KEPT *-----0
IEF285I VOL SER NOS= SYSCPK.
IEF285I UCSYSCPK KEPT *-----0
IEF285I VOL SER NOS= SYSCPK.
IEF373I STEP /LKED / START 21363.1338
IEF374I STEP /LKED / STOP 21363.1338 CPU 0MIN 00.04SEC SRB 0MIN 00.01SEC VIRT 128K SYS 236K

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* STEP NUMBER:          4  USER CORE:          128K  START TIME:    13:38:57    CPU TIME:      00:00:00.05  ACTIVE TIME:  00:00:00.05 *
* STEP NAME:          LKED  SYSTEM CORE:        236K  STOP TIME:     13:38:57    SRB TIME:      00:00:00.01  ALLOC TIME:   13:38:57 *
* PROGRAM NAME:      IEWL   REGION SIZE:        128K  ELAPSED TIME: 00:00:00.08  TCB TIME:      00:00:00.04  PROGRAM LOAD: 13:38:57 *
* CONDITION CODE:    00000  PERFORMANCE GROUP: 004 *
* JES2 CARDS:          0      SERVICE UNITS  PAGES IN/OUT  # SWAPS  PAGES SWAP IN/OUT  VIO PAGES IN/OUT *
*                               1,684          0 /    0          0          0 /    0          0 /    0 *
*
* ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT *
* 252/D3350           277 180/D3380          14 180/D3380          0 370/D3375          0 253/D3350          37 253/D3350          0 *
* 253/D3350           0 *
*****
IEF236I ALLOC. FOR COBUCL7 COMPCODE
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF142I COBUCL7 COMPCODE - STEP WAS EXECUTED - COND CODE 0000
IEF285I JES2.JOB00958.S00109 SYSOUT
IEF373I STEP /COMPCODE/ START 21363.1338
IEF374I STEP /COMPCODE/ STOP 21363.1338 CPU 0MIN 00.01SEC SRB 0MIN 00.00SEC VIRT 16K SYS 188K
*****
*
* STEP NUMBER:          5  USER CORE:          16K  START TIME:    13:38:57    CPU TIME:      00:00:00.01  ACTIVE TIME:  00:00:00.02 *
* STEP NAME:          COMPCODE  SYSTEM CORE:        188K  STOP TIME:     13:38:57    SRB TIME:      00:00:00.00  ALLOC TIME:   13:38:57 *
* PROGRAM NAME:      COMPCODE  REGION SIZE:        512K  ELAPSED TIME: 00:00:00.02  TCB TIME:      00:00:00.01  PROGRAM LOAD: 13:38:57 *
* CONDITION CODE:    00000  PERFORMANCE GROUP: 004 *
* JES2 CARDS:          0      SERVICE UNITS  PAGES IN/OUT  # SWAPS  PAGES SWAP IN/OUT  VIO PAGES IN/OUT *
*                               22          0 /    0          0          0 /    0          0 /    0 *
*
* ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT  ADDR/UNIT I/O COUNT *
*****
IEF375I JOB /COBUCL7 / START 21363.1338
IEF376I JOB /COBUCL7 / STOP 21363.1338 CPU 0MIN 00.36SEC SRB 0MIN 00.07SEC
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00001 000100 IDENTIFICATION DIVISION.
00002 000200 PROGRAM-ID. VSUPDT.
00003 000300 AUTHOR. JAY MOSELEY.
00004 000400 DATE-WRITTEN. DECEMBER, 2021.
00005 000500 DATE-COMPILED. DEC 29, 202.
00006 000600 REMARKS. READS UPDATE INFORMATION FROM SEQUENTIAL DATASET AND UPDATES
00007 000700          VSAM DATASET, WHICH IS ACCESSED RANDOMLY. UPDATES PROCESSED
00008 000800          INCLUDE CHANGING FIELD VALUES OF EXISTING RECORDS, ADDING
00009 000900          NEW RECORDS, AND DELETING RECORDS.
00010 001000*
00011 001100 ENVIRONMENT DIVISION.
00012 001200 CONFIGURATION SECTION.
00013 001300 SOURCE-COMPUTER. IBM-370.
00014 001400 OBJECT-COMPUTER. IBM-370.
00015 001500 INPUT-OUTPUT SECTION.
00016 001600 FILE-CONTROL.
00017 001700*
00018 001800     SELECT UPDATE-FILE
00019 001900     ASSIGN TO UT-S-SYSUT1.
00020 002000*
00021 002100     SELECT REPORT-FILE
00022 002200     ASSIGN TO UR-S-REPORT.
00023 002300*
00024 002400 DATA DIVISION.
00025 002500 FILE SECTION.
00026 002600*
00027 002700 FD  UPDATE-FILE
00028 002800     LABEL RECORDS ARE STANDARD
00029 002900     BLOCK CONTAINS 0 RECORDS
00030 003000     RECORD CONTAINS 80 CHARACTERS
00031 003100     DATA RECORD IS UPDATE-RECD.
00032 003200 01  UPDATE-RECD.
00033 003300     02  UPDATE-KEY.
00034 003400         03  UPDATE-ID          PIC X(7).
00035 003500         03  UPDATE-ACTION      PIC X.
00036 003600         88  ACTION-IS-VALID    VALUE 'U' 'A' 'D'.
00037 003700     02  UPDATE-FIELD          PIC X(2).
00038 003800         88  VALID-UPDATE-FIELD VALUE '01' '02' '03'
00039 003900                                '04' '05' '06'
00040 004000                                '07' '08' '09'
00041 004100                                '10'.
00042 004200         88  UPDATE-FIELD-FIRST-NAME VALUE '01'.
00043 004300         88  UPDATE-FIELD-INITIAL   VALUE '02'.
00044 004400         88  UPDATE-FIELD-LAST-NAME VALUE '03'.
00045 004500         88  UPDATE-FIELD-STREET    VALUE '04'.
00046 004600         88  UPDATE-FIELD-CITY      VALUE '05'.
00047 004700         88  UPDATE-FIELD-GENDER    VALUE '06'.
00048 004800         88  UPDATE-FIELD-PHONE     VALUE '07'.
00049 004900         88  UPDATE-FIELD-DATE1     VALUE '08'.
00050 005000         88  UPDATE-FIELD-DATE2     VALUE '09'.
00051 005100         88  UPDATE-FIELD-DATE3     VALUE '10'.
00052 005200     02  UPDATE-DATA           PIC X(70).
00053 005300     02  UPDATA-DATA-01        REDEFINES UPDATE-DATA.
00054 005400         03  UPDATE-DATA-FIRST-NAME PIC X(15).

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00055	005500		03	FILLER		PIC X(55).
00056	005600	02		UPDATA-DATA-02		REDEFINES UPDATE-DATA.
00057	005700		03	UPDATE-DATA-INITIAL		PIC X.
00058	005800		03	FILLER		PIC X(69).
00059	005900	02		UPDATA-DATA-03		REDEFINES UPDATE-DATA.
00060	006000		03	UPDATE-DATA-LAST-NAME		PIC X(20).
00061	006100		03	FILLER		PIC X(50).
00062	006200	02		UPDATA-DATA-04		REDEFINES UPDATE-DATA.
00063	006300		03	UPDATE-DATA-STREET		PIC X(35).
00064	006400		03	FILLER		PIC X(35).
00065	006500	02		UPDATA-DATA-05		REDEFINES UPDATE-DATA.
00066	006600		03	UPDATE-DATA-CITY		PIC X(35).
00067	006700		03	FILLER		PIC X(35).
00068	006800	02		UPDATA-DATA-06		REDEFINES UPDATE-DATA.
00069	006900		03	UPDATE-DATA-GENDER		PIC X.
00070	007000		03	FILLER		PIC X(69).
00071	007100	02		UPDATA-DATA-07		REDEFINES UPDATE-DATA.
00072	007200		03	UPDATE-DATA-PHONE		PIC X(10).
00073	007300		03	FILLER		PIC X(60).
00074	007400	02		UPDATA-DATA-08-10		REDEFINES UPDATE-DATA.
00075	007500		03	UPDATE-DATA-DATE		PIC X(8).
00076	007600		03	FILLER		PIC X(62).
00077	007700*					
00078	007800	FD		REPORT-FILE		
00079	007900			LABEL RECORDS ARE OMITTED		
00080	008000			REPORT IS UPDATE-REPORT.		
00081	008100*					
00082	008200			WORKING-STORAGE SECTION.		
00083	008300	01		SWITCHES-FOR-TESTS.		
00084	008400		02	UPDATE-FILE-END-SWITCH	PIC X	VALUE 'N'.
00085	008500		88	UPDATE-FILE-END		VALUE 'Y'.
00086	008600	02		UPDATE-RECORD-VALID-SW	PIC X	VALUE 'N'.
00087	008700		88	UPDATE-RECD-VALID		VALUE 'Y'.
00088	008800	02		READ-INVALID-KEY-SW	PIC X	VALUE 'N'.
00089	008900		88	READ-INVALID-KEY		VALUE 'Y'.
00090	009000	02		REWRITE-INVALID-KEY-SW	PIC X	VALUE 'N'.
00091	009100		88	REWRITE-INVALID-KEY		VALUE 'Y'.
00092	009200	02		WRITE-INVALID-KEY-SW	PIC X	VALUE 'N'.
00093	009300		88	WRITE-INVALID-KEY		VALUE 'Y'.
00094	009400*					
00095	009500	01		RECORD-COUNTERS		USAGE IS COMP-3.
00096	009600		02	UPDATE-RECORD-COUNT	PIC S9(5)	VALUE +0.
00097	009700		02	ERRONEOUS-UPDATE-COUNT	PIC S9(5)	VALUE +0.
00098	009800		02	CHANGED-RECORD-COUNT	PIC S9(5)	VALUE +0.
00099	009900		02	DELETED-RECORD-COUNT	PIC S9(5)	VALUE +0.
00100	010000		02	ADDED-RECORD-COUNT	PIC S9(5)	VALUE +0.
00101	010100		02	UNMATCHED-CHANGE-COUNT	PIC S9(5)	VALUE +0.
00102	010200		02	DUPLICATE-ADD-COUNT	PIC S9(5)	VALUE +0.
00103	010300*					
00104	010400	01		WS-UPDATE-RECORD		VALUE LOW-VALUES.
00105	010500		02	WSUR-KEY.		
00106	010600		03	WSUR-ID	PIC X(7).	
00107	010700		03	WSUR-ACTION	PIC X.	
00108	010800		88	ACTION-IS-CHANGE		VALUE 'U'.
00109	010900		88	ACTION-IS-ADD		VALUE 'A'.
00110	011000		88	ACTION-IS-DELETE		VALUE 'D'.
00111	011100	02		WSUR-FIRST-NAME	PIC X(15).	

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00112 011200 02 WSUR-INITIAL PIC X.
00113 011300 02 WSUR-LAST-NAME PIC X(20).
00114 011400 02 WSUR-STREET PIC X(35).
00115 011500 02 WSUR-CITY PIC X(35).
00116 011600 02 WSUR-GENDER PIC X.
00117 011700 02 WSUR-PHONE PIC X(10).
00118 011800 02 WSUR-DATE1 PIC X(8).
00119 011900 02 WSUR-DATE2 PIC X(8).
00120 012000 02 WSUR-DATE3 PIC X(8).
00121 012100*
00122 012200 01 VSIO-PARAMETER-VALUES COPY VSAMIO.
00123 C 000100* ***** *06980000
00124 C 000200* *06990000
00125 C 000300* VV VV SSSSS A M M IIII 00000 *07000000
00126 C 000400* VV VV SS SS AAA MM MM II 00 00 *07010000
00127 C 000500* VV VV SS AA AA MMM MMM II 00 00 *07020000
00128 C 000600* VV VV SSSSS AA AA MMMMMMMM II 00 00 *07030000
00129 C 000700* VV VV SS AA AA MM M MM II 00 00 *07040000
00130 C 000800* VV VV SS SS AAAAAA MM MM II 00 00 *07050000
00131 C 000900* VVV SS SS AA AA MM MM II 00 00 *07060000
00132 C 001000* V SSSSS AA AA MM MM IIII 00000 *07070000
00133 C 001100* *07080000
00134 C 001200* ***** *07090000
00135 C 001300* *07100000
00136 C 001400* THESE PARAMETERS ARE USED TO INTERFACE WITH THE VSAM DATASET *07110000
00137 C 001500* ACCESS ROUTINE. *07120000
00138 C 001600* *07130000
00139 C 001700* THE VSIO-PARAMETER-VALUES SUPPLY THE VALUES USED TO MOVE INTO *07140000
00140 C 001800* PARAMETER ENTRIES TO TAILOR THE ROUTINE TO A SPECIFIC DATASET *07150000
00141 C 001900* AND TO PROVIDE COMMANDS TO DRIVE THE ROUTINE. *07160000
00142 C 002000* ***** *07170000
00143 C 002100 01 VSIO-PARAMETER-VALUES. 07180000
00144 C 002200 02 VSIO-OPEN PIC X(08) VALUE 'OPEN ' 07190000
00145 C 002300 02 VSIO-CLOSE PIC X(08) VALUE 'CLOSE ' 07200000
00146 C 002400 02 VSIO-READ PIC X(08) VALUE 'READ ' 07210000
00147 C 002500 02 VSIO-WRITE PIC X(08) VALUE 'WRITE ' 07220000
00148 C 002600 02 VSIO-REWRITE PIC X(08) VALUE 'REWRITE ' 07230000
00149 C 002700 02 VSIO-DELETE PIC X(08) VALUE 'DELETE ' 07240000
00150 C 002800 02 VSIO-START-KEY-EQUAL PIC X(08) VALUE 'STARTEQ ' 07250000
00151 C 002900 02 VSIO-START-KEY-NOTLESS PIC X(08) VALUE 'STARTGE ' 07260000
00152 C 003000 02 VSIO-KSDS PIC X(04) VALUE 'KSDS' 07270000
00153 C 003100 02 VSIO-ESDS PIC X(04) VALUE 'ESDS' 07280000
00154 C 003200 02 VSIO-RRDS PIC X(04) VALUE 'RRDS' 07290000
00155 C 003300 02 VSIO-SEQUENTIAL PIC X(10) VALUE 'SEQUENTIAL' 07300000
00156 C 003400 02 VSIO-DIRECT PIC X(10) VALUE 'DIRECT ' 07310000
00157 C 003500 02 VSIO-DYNAMIC PIC X(10) VALUE 'DYNAMIC ' 07320000
00158 C 003600 02 VSIO-INPUT PIC X(06) VALUE 'INPUT ' 07330000
00159 C 003700 02 VSIO-OUTPUT PIC X(06) VALUE 'OUTPUT' 07340000
00160 C 003800 02 VSIO-INPUT-OUTPUT PIC X(06) VALUE 'UPDATE' 07350000
00161 C 003900 07360000
00162 C 004000* ***** *07370000
00163 C 004100* THE VSIO-PARAMETER-BLOCK IS THE COMMUNICATION INTERFACE TO *07380000
00164 C 004200* THE ROUTINE. *07390000
00165 C 004300* ***** *07400000
00166 C 004400 01 VSIO-PARAMETER-BLOCK. 07410000
00167 C 004500 02 VSIO-COMMAND PIC X(08). 07420000
00168 C 004600 02 VSIO-RETURN-CODE PIC S9(04) COMP. 07430000

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00169 C 004700      88 VSIO-SUCCESS                VALUE +0.          07440000
00170 C 004800      88 VSIO-LOGIC-ERROR              VALUE +8.          07450000
00171 C 004900      88 VSIO-END-OF-FILE                VALUE +9999.       07460000
00172 C 005000      88 VSIO-PARAMETER-ERROR            VALUE +20 THRU +28. 07470000
00173 C 005100      88 VSIO-COMMAND-UNKNOWN              VALUE +20.         07480000
00174 C 005200      88 VSIO-DATASET-ALREADY-OPEN            VALUE +21.         07490000
00175 C 005300      88 VSIO-DATASET-NOT-OPEN              VALUE +22.         07500000
00176 C 005400      88 VSIO-ORGANIZATION-KEYWORD            VALUE +23.         07510000
00177 C 005500      88 VSIO-ACCESS-KEYWORD                VALUE +24.         07520000
00178 C 005600      88 VSIO-ACCESS-UNSUPPORTED            VALUE +25.         07530000
00179 C 005700      88 VSIO-MODE-KEYWORD                  VALUE +26.         07540000
00180 C 005800      88 VSIO-MODE-UNSUPPORTED              VALUE +27.         07550000
00181 C 005900      88 VSIO-DDNAME-BLANK                  VALUE +28.         07560000
00182 C 006000      02 VSIO-VSAM-RETURN-CODE      PIC S9(04)  COMP.      07570000
00183 C 006100      02 VSIO-VSAM-FUNCTION-CODE     PIC S9(04)  COMP.      07580000
00184 C 006200      02 VSIO-VSAM-FEEDBACK-CODE     PIC S9(04)  COMP.      07590000
00185 C 006300      88 VSIO-DUPLICATE-RECORD            VALUE +8.          07600000
00186 C 006400      88 VSIO-SEQUENCE-ERROR              VALUE +12.         07610000
00187 C 006500      88 VSIO-RECORD-NOT-FOUND              VALUE +16.         07620000
00188 C 006600      88 VSIO-NO-MORE-SPACE                VALUE +28.         07630000
00189 C 006700      88 VSIO-READ-WITHOUT-START            VALUE +88.         07640000
00190 C 006800* ***** *07650000
00191 C 006900*                END OF VSAMIO COPY BOOK *07660000
00192 C 007000* ***** *07670000
00193      012300 01 KSDSF01                COPY VSAMIOFB.
00194 C 000100* ***** *00000100
00195 C 000200* ***** *00000200
00196 C 000300* VV  VV  SSSSS  A  M  M  IIII  00000  FFFFFFFF BBBBBB *00000300
00197 C 000400* VV  VV SS  SS  AAA  MM  MM  II  00  00 FF  BB  BB *00000400
00198 C 000500* VV  VV SS  SS  AA AA  MMM  MMM  II  00  00 FF  BB  BB *00000500
00199 C 000600* VV  VV  SSSSS  AA  AA  MMMMMMMM  II  00  00 FFFFF  BBBBBB *00000600
00200 C 000700* VV  VV  SS  SS  AA  AA  MM  M  MM  II  00  00 FF  BB  BB *00000700
00201 C 000800* VV VV SS  SS  AAAAAA MM  MM  II  00  00 FF  BB  BB *00000800
00202 C 000900* VVV  SS  SS  AA  AA  MM  MM  II  00  00 FF  BB  BB *00000900
00203 C 001000* V  SSSSS  AA  AA  MM  MM  IIII  00000  FF  BBBBBB *00001000
00204 C 001100* ***** *00001100
00205 C 001200* ***** *00001200
00206 C 001300* THESE PARAMETERS ARE USED TO INTERFACE WITH THE VSAM DATASET *00001300
00207 C 001400* ACCESS ROUTINE, AND ARE USED TO COMMUNICATE CHARACTERISTICS *00001400
00208 C 001500* FOR A SINGLE VSAM DATASET. *00001500
00209 C 001600* ***** *00001600
00210 C 001700* WITH THE 2 EXCEPTIONS FOR RECORD LENGTH (TO ACCOMODATE *00001700
00211 C 001800* VARIABLE LENGTH RECORDS) AND RELATIVE RECORD (TO ACCOMODATE *00001800
00212 C 001900* RELATIVE RECORD DATASETS) THESE DATA NAMES MUST BE POPULATED *00001900
00213 C 002000* PRIOR TO CALLING THE ROUTINE TO OPEN THE DATASET AND MUST NOT *00002000
00214 C 002100* THEN BE CHANGED UNTIL THE DATASET HAS BEEN CLOSED. *00002100
00215 C 002200* ***** *00002200
00216 C 002300 01 KSDSF01.                00002300
00217 C 002400      02 VSIO-DDNAME                PIC X(08)  VALUE SPACES. 00002400
00218 C 002500      02 VSIO-ORGANIZATION            PIC X(04)  VALUE SPACES. 00002500
00219 C 002600      02 VSIO-ACCESS                  PIC X(10)  VALUE SPACES. 00002600
00220 C 002700      02 VSIO-MODE                    PIC X(06)  VALUE SPACES. 00002700
00221 C 002800      02 VSIO-RECORD-LENGTH            PIC S9(04)  COMP VALUE +0. 00002800
00222 C 002900      02 VSIO-KEY-ARGUMENT.                00002900
00223 C 003000      03 VSIO-KEY-POSITION            PIC S9(04)  COMP VALUE +0. 00003000
00224 C 003100      03 VSIO-KEY-LENGTH              PIC S9(04)  COMP VALUE +0. 00003100
00225 C 003200      02 VSIO-RELATIVE-RECORD          REDEFINES VSIO-KEY-ARGUMENT 00003200

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00226 C 003300          PIC S9(08)  COMP.          00003300
00227 C 003400      02  FILLER          PIC  X(01)  VALUE  'C'.          00003400
00228 C 003500          88  VSIO-FILE-OPEN          VALUE  'O'.          00003500
00229 C 003600          88  VSIO-FILE-CLOSED          VALUE  'C'.          00003600
00230 C 003700      02  FILLER          PIC  X(161).          00003700
00231 C 003800* ***** *00003800
00232 C 003900*          END OF VSAMIOFB COPY BOOK          *00003900
00233 C 004000* ***** *00004000
00234 012400 01  MASTER-RECD.
00235 012500      02  MR-DELETE-CODE          PIC  X.
00236 012600      02  MR-ID          PIC  9(7).
00237 012700      02  MR-FIRST-NAME          PIC  X(15).
00238 012800      02  MR-INITIAL          PIC  X.
00239 012900      02  MR-LAST-NAME          PIC  X(20).
00240 013000      02  MR-STREET          PIC  X(35).
00241 013100      02  MR-CITY-STATE-ZIP          PIC  X(35).
00242 013200      02  MR-GENDER-CODE          PIC  X.
00243 013300      02  MR-TELEPHONE          PIC  X(10).
00244 013400      02  FILLER          REDEFINES MR-TELEPHONE.
00245 013500          03  MR-TELEPHONE-A          PIC  9(3).
00246 013600          03  MR-TELEPHONE-P          PIC  9(3).
00247 013700          03  MR-TELEPHONE-N          PIC  9(4).
00248 013800      02  MR-DATE-1          PIC  X(8).
00249 013900      02  FILLER          REDEFINES MR-DATE-1.
00250 014000          03  MR-DATE-1M          PIC  9(2).
00251 014100          03  MR-DATE-1D          PIC  9(2).
00252 014200          03  MR-DATE-1Y          PIC  9(4).
00253 014300      02  MR-DATE-2          PIC  X(8).
00254 014400      02  FILLER          REDEFINES MR-DATE-2.
00255 014500          03  MR-DATE-2M          PIC  9(2).
00256 014600          03  MR-DATE-2D          PIC  9(2).
00257 014700          03  MR-DATE-2Y          PIC  9(4).
00258 014800      02  MR-DATE-3          PIC  X(8).
00259 014900      02  FILLER          REDEFINES MR-DATE-3.
00260 015000          03  MR-DATE-3M          PIC  9(2).
00261 015100          03  MR-DATE-3D          PIC  9(2).
00262 015200          03  MR-DATE-3Y          PIC  9(4).
00263 015300      02  MR-SORT-NAME          PIC  X(36).
00264 015400      02  FILLER          PIC  X(15).
00265 015500*
00266 015600 01  ERROR-MESSAGES.
00267 015700      02  FILLER          PIC  X(50) VALUE
00268 015800          'RECORD ID TO UPDATE NOT NUMERIC'.
00269 015900      02  FILLER          PIC  X(50) VALUE
00270 016000          'UPDATE ACTION NOT VALID (U/A/D)'.
00271 016100      02  FILLER          PIC  X(50) VALUE
00272 016200          'UPDATE FIELD NUMBER NOT VALID (01-10)'.
00273 016300      02  FILLER          PIC  X(50) VALUE
00274 016400          'FIRST NAME MAY NOT BE SPACES'.
00275 016500      02  FILLER          PIC  X(50) VALUE
00276 016600          'LAST NAME MAY NOT BE SPACES'.
00277 016700      02  FILLER          PIC  X(50) VALUE
00278 016800          'STREET MAY NOT BE SPACES'.
00279 016900      02  FILLER          PIC  X(50) VALUE
00280 017000          'CITY, STATE, ZIP MAY NOT BE SPACES'.
00281 017100      02  FILLER          PIC  X(50) VALUE
00282 017200          'GENDER CODE MUST BE "F" OR "M"'.

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00283	017300	02	FILLER	PIC X(50) VALUE
00284	017400		'TELEPHONE NUMBER MUST BE NUMERIC'.	
00285	017500	02	FILLER	PIC X(50) VALUE
00286	017600		'DATE FIELD CONTAINS INVALID CHARACTER'.	
00287	017700	02	FILLER	PIC X(50) VALUE
00288	017800		'YEAR IS NOT VALID FOR DATE'.	
00289	017900	02	FILLER	PIC X(50) VALUE
00290	018000		'MONTH IS NOT VALID FOR DATE'.	
00291	018100	02	FILLER	PIC X(50) VALUE
00292	018200		'DAY IS NOT VALID FOR DATE'.	
00293	018300	02	FILLER	PIC X(50) VALUE
00294	018400		'MASTER RECORD ALREADY EXISTS FOR ADD'.	
00295	018500	02	FILLER	PIC X(50) VALUE
00296	018600		'MASTER RECORD NOT FOUND FOR CHANGE/DELETE'.	
00297	018700	02	FILLER	PIC X(50) VALUE
00298	018800		'INVALID KEY ON REWRITE'.	
00299	018900	02	FILLER	PIC X(50) VALUE
00300	019000		'INVALID KEY ON WRITE'.	
00301	019100	01	ERROR-MESSAGE-TABLE	REDEFINES ERROR-MESSAGES.
00302	019200	02	ERROR-MESSAGE-TEXT	OCCURS 17 TIMES
00303	019300			INDEXED BY EMX
00304	019400			PIC X(50).
00305	019500*			
00306	019600	01	DETAIL-TYPES.	
00307	019700	02	FILLER	PIC X(9) VALUE '-BEFORE- '.
00308	019800	02	FILLER	PIC X(9) VALUE '-AFTER- '.
00309	019900	02	FILLER	PIC X(9) VALUE '-ADDED- '.
00310	020000	02	FILLER	PIC X(9) VALUE '-DELETED- '.
00311	020100	01	DETAIL-TYPES-TABLE	REDEFINES DETAIL-TYPES.
00312	020200	02	DETAIL-TYPE	OCCURS 4 TIMES
00313	020300			INDEXED BY DTX
00314	020400			PIC X(9).
00315	020500*			
00316	020600	01	GTOA-PARAMETERS.	
00317	020700	02	GTOAP-DATE-G	PIC X(8).
00318	020800	02	GTOAP-RETURN-CODE	PIC 9(1).
00319	020900	02	GTOAP-ANUM	PIC S9(7).
00320	021000	02	FILLER	PIC X(26).
00321	021100*			
00322	021200		REPORT SECTION.	
00323	021300	RD	UPDATE-REPORT	
00324	021400		CONTROLS IS FINAL	
00325	021500		PAGE LIMIT IS 60 LINES	
00326	021600		FIRST DETAIL 3	
00327	021700		LAST DETAIL 55.	
00328	021800*			
00329	021900	01	HEADING-ON-PAGE	TYPE IS PAGE HEADING.
00330	022000	02	LINE 1.	
00331	022100*			
00332	022200	01	VALIDATE-ERROR-DETAIL	TYPE IS DETAIL.
00333	022300	02	LINE PLUS 1.	
00334	022400	03	COLUMN 01	PIC X(60)
00335	022500			SOURCE IS UPDATE-RECD.
00336	022600	03	COLUMN 50	PIC X(50)
00337	022700			SOURCE IS
00338	022800		ERROR-MESSAGE-TEXT (EMX).	
00339	022900	02	LINE PLUS 1.	

00340	023000*			
00341	023100	01	RECORD-FIELDS-DETAIL	TYPE IS DETAIL.
00342	023200	02	LINE PLUS 1.	
00343	023300		03 COLUMN 01	PIC X
00344	023400			SOURCE IS MR-DELETE-CODE.
00345	023500		03 COLUMN 03	PIC 9(7)
00346	023600			SOURCE IS MR-ID.
00347	023700		03 COLUMN 11	PIC X(15)
00348	023800			SOURCE IS MR-FIRST-NAME.
00349	023900		03 COLUMN 27	PIC X
00350	024000			SOURCE IS MR-INITIAL.
00351	024100		03 COLUMN 29	PIC X(20)
00352	024200			SOURCE IS MR-LAST-NAME.
00353	024300		03 COLUMN 50	PIC X(35)
00354	024400			SOURCE IS MR-STREET.
00355	024500		03 COLUMN 86	PIC X
00356	024600			SOURCE IS MR-GENDER-CODE.
00357	024700		03 COLUMN 88	PIC X
00358	024800			VALUE '('.
00359	024900		03 COLUMN 89	PIC 9(3)
00360	025000			SOURCE IS MR-TELEPHONE-A.
00361	025100		03 COLUMN 92	PIC X
00362	025200			VALUE ') '.
00363	025300		03 COLUMN 93	PIC 9(3)
00364	025400			SOURCE IS MR-TELEPHONE-P.
00365	025500		03 COLUMN 96	PIC X
00366	025600			VALUE '- '.
00367	025700		03 COLUMN 97	PIC 9(4)
00368	025800			SOURCE IS MR-TELEPHONE-N.
00369	025900		03 COLUMN 102	PIC 9(2)
00370	026000			SOURCE IS MR-DATE-1M.
00371	026100		03 COLUMN 104	PIC X
00372	026200			VALUE '/'.
00373	026300		03 COLUMN 105	PIC 9(2)
00374	026400			SOURCE IS MR-DATE-1D.
00375	026500		03 COLUMN 107	PIC X
00376	026600			VALUE '/'.
00377	026700		03 COLUMN 108	PIC 9(4)
00378	026800			SOURCE IS MR-DATE-1Y.
00379	026900		03 COLUMN 113	PIC 9(2)
00380	027000			SOURCE IS MR-DATE-2M.
00381	027100		03 COLUMN 115	PIC X
00382	027200			VALUE '/'.
00383	027300		03 COLUMN 116	PIC 9(2)
00384	027400			SOURCE IS MR-DATE-2D.
00385	027500		03 COLUMN 118	PIC X
00386	027600			VALUE '/'.
00387	027700		03 COLUMN 119	PIC 9(4)
00388	027800			SOURCE IS MR-DATE-2Y.
00389	027900		03 COLUMN 124	PIC X(9)
00390	028000			SOURCE IS DETAIL-TYPE (DTX).
00391	028100	02	LINE PLUS 1.	
00392	028200		03 COLUMN 11	PIC X(36)
00393	028300			SOURCE IS MR-SORT-NAME.
00394	028400		03 COLUMN 50	PIC X(35)
00395	028500			SOURCE IS MR-CITY-STATE-ZIP.
00396	028600		03 COLUMN 102	PIC 9(2)

00397	028700			SOURCE IS MR-DATE-3M.
00398	028800		03 COLUMN 104	PIC X
00399	028900			VALUE '/'.
00400	029000		03 COLUMN 105	PIC 9(2)
00401	029100			SOURCE IS MR-DATE-3D.
00402	029200		03 COLUMN 107	PIC X
00403	029300			VALUE '/'.
00404	029400		03 COLUMN 108	PIC 9(4)
00405	029500			SOURCE IS MR-DATE-3Y.
00406	029600		02 LINE PLUS 1.	
00407	029700*			
00408	029800	01	WRITE-ERROR-DETAIL	TYPE IS DETAIL.
00409	029900		02 LINE PLUS 2.	
00410	030000		03 COLUMN 01	PIC X(7)
00411	030100			SOURCE IS MR-ID.
00412	030200		03 COLUMN 10	PIC X(50)
00413	030300			SOURCE IS
00414	030400		ERROR-MESSAGE-TEXT (EMX).	
00415	030500		02 LINE PLUS 1.	
00416	030600*			
00417	030700	01	REPORT-FOOTING	TYPE IS CONTROL FOOTING FINAL.
00418	030800		02 LINE NEXT PAGE.	
00419	030900		03 COLUMN 01	PIC ZZ,ZZ9
00420	031000			SOURCE IS UPDATE-RECORD-COUNT.
00421	031100		03 COLUMN 08	PIC X(50)
00422	031200			VALUE
00423	031300		'UPDATE RECORDS READ'.	
00424	031400	02	LINE PLUS 1.	
00425	031500		03 COLUMN 01	PIC ZZ,ZZ9
00426	031600			SOURCE IS ERRONEOUS-UPDATE-COUNT.
00427	031700		03 COLUMN 08	PIC X(50)
00428	031800			VALUE
00429	031900		'UPDATE RECORDS WITH INVALID DATA'.	
00430	032000	02	LINE PLUS 2.	
00431	032100		03 COLUMN 01	PIC ZZ,ZZ9
00432	032200			SOURCE IS CHANGED-RECORD-COUNT.
00433	032300		03 COLUMN 08	PIC X(50)
00434	032400			VALUE
00435	032500		'MASTER RECORDS UPDATED'.	
00436	032600	02	LINE PLUS 1.	
00437	032700		03 COLUMN 01	PIC ZZ,ZZ9
00438	032800			SOURCE IS DELETED-RECORD-COUNT.
00439	032900		03 COLUMN 08	PIC X(50)
00440	033000			VALUE
00441	033100		'MASTER RECORDS DELETED'.	
00442	033200	02	LINE PLUS 1.	
00443	033300		03 COLUMN 01	PIC ZZ,ZZ9
00444	033400			SOURCE IS ADDED-RECORD-COUNT.
00445	033500		03 COLUMN 08	PIC X(50)
00446	033600			VALUE
00447	033700		'MASTER RECORDS ADDED'.	
00448	033800	02	LINE PLUS 2.	
00449	033900		03 COLUMN 01	PIC ZZ,ZZ9
00450	034000			SOURCE IS UNMATCHED-CHANGE-COUNT.
00451	034100		03 COLUMN 08	PIC X(50)
00452	034200			VALUE
00453	034300		'ATTEMPTED UPDATES/DELETES WITH NO MATCHING MASTER'.	

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00454 034400 02 LINE PLUS 1.
00455 034500 03 COLUMN 01 PIC ZZ,ZZ9
00456 034600 SOURCE IS DUPLICATE-ADD-COUNT.
00457 034700 03 COLUMN 08 PIC X(50)
00458 034800 VALUE
00459 034900 'ATTEMPTED ADDS WITH DUPLICATE MASTER'.
00460 035000*
00461 035100 PROCEDURE DIVISION.
00462 035200*
00463 035300 OPEN-FILES.
00464 035400*
00465 035500 OPEN INPUT UPDATE-FILE,
00466 035600 OUTPUT REPORT-FILE.
00467 035700*
00468 035800 MOVE 'MASTER' TO VSIO-DDNAME.
00469 035900 MOVE VSIO-KSDS TO VSIO-ORGANIZATION.
00470 036000 MOVE VSIO-DIRECT TO VSIO-ACCESS.
00471 036100 MOVE VSIO-INPUT-OUTPUT TO VSIO-MODE.
00472 036200 MOVE +2000 TO VSIO-RECORD-LENGTH.
00473 036300 MOVE +1 TO VSIO-KEY-POSITION.
00474 036400 MOVE +7 TO VSIO-KEY-LENGTH.
00475 036500 MOVE VSIO-OPEN TO VSIO-COMMAND.
00476 036600 CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00477 036700 MASTER-RECD.
00478 036800 IF NOT VSIO-SUCCESS
00479 036900 DISPLAY 'VSAMIO ERROR OCCURRED DURING '
00480 037000 VSIO-COMMAND
00481 037100 EXHIBIT NAMED VSIO-RETURN-CODE,
00482 037200 EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
00483 037300 VSIO-VSAM-FUNCTION-CODE,
00484 037400 VSIO-VSAM-FEEDBACK-CODE
00485 037500 STOP RUN
00486 037600 .
00487 037700*
00488 037800 INITIATE UPDATE-REPORT.
00489 037900 PERFORM PROCESS-UPDATE-FILE
00490 038000 THRU PROCESS-UPDATE-FILE-EXIT
00491 038100 UNTIL UPDATE-FILE-END.
00492 038200 IF WSUR-KEY NOT = LOW-VALUES
00493 038300 PERFORM PROCESS-UPDATE-SET
00494 038400 THRU PROCESS-UPDATE-SET-EXIT.
00495 038500 TERMINATE UPDATE-REPORT.
00496 038600*
00497 038700 MOVE VSIO-CLOSE TO VSIO-COMMAND.
00498 038800 CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00499 038900 MASTER-RECD.
00500 039000 IF NOT VSIO-SUCCESS
00501 039100 DISPLAY 'VSAMIO ERROR OCCURRED DURING '
00502 039200 VSIO-COMMAND
00503 039300 EXHIBIT NAMED VSIO-RETURN-CODE,
00504 039400 EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
00505 039500 VSIO-VSAM-FUNCTION-CODE,
00506 039600 VSIO-VSAM-FEEDBACK-CODE
00507 039700 .
00508 039800*
00509 039900 CLOSE UPDATE-FILE,
00510 040000 REPORT-FILE.

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00511 040100*
00512 040200      GOBACK.
00513 040300*
00514 040400 PROCESS-UPDATE-FILE.
00515 040500*
00516 040600      READ UPDATE-FILE
00517 040700          AT END
00518 040800          MOVE 'Y' TO UPDATE-FILE-END-SWITCH
00519 040900      .
00520 041000      IF NOT UPDATE-FILE-END
00521 041100          ADD 1 TO UPDATE-RECORD-COUNT
00522 041200          PERFORM PROCESS-UPDATE-RECORD
00523 041300          THRU PROCESS-UPDATE-RECORD-EXIT
00524 041400      .
00525 041500*
00526 041600 PROCESS-UPDATE-FILE-EXIT.
00527 041700      EXIT.
00528 041800*
00529 041900 PROCESS-UPDATE-RECORD.
00530 042000*
00531 042100      IF WSUR-KEY = LOW-VALUES
00532 042200          MOVE UPDATE-KEY TO WSUR-KEY
00533 042300          MOVE WSUR-ID TO MR-ID
00534 042400          PERFORM READ-VSAM-MASTER
00535 042500          THRU READ-VSAM-MASTER-EXIT
00536 042600      ELSE
00537 042700          IF UPDATE-KEY NOT = WSUR-KEY
00538 042800              PERFORM PROCESS-UPDATE-SET
00539 042900              THRU PROCESS-UPDATE-SET-EXIT
00540 043000              MOVE LOW-VALUES TO WS-UPDATE-RECORD
00541 043100              MOVE UPDATE-KEY TO WSUR-KEY
00542 043200              MOVE WSUR-ID TO MR-ID
00543 043300              PERFORM READ-VSAM-MASTER
00544 043400              THRU READ-VSAM-MASTER-EXIT
00545 043500      .
00546 043600*
00547 043700      MOVE 'Y' TO UPDATE-RECORD-VALID-SW.
00548 043800*
00549 043900      IF UPDATE-ID IS NOT NUMERIC
00550 044000          SET EMX TO 1
00551 044100          GENERATE VALIDATE-ERROR-DETAIL
00552 044200          MOVE 'N' TO UPDATE-RECORD-VALID-SW
00553 044300      .
00554 044400*
00555 044500      IF NOT ACTION-IS-VALID
00556 044600          SET EMX TO 2
00557 044700          GENERATE VALIDATE-ERROR-DETAIL
00558 044800          MOVE 'N' TO UPDATE-RECORD-VALID-SW
00559 044900      .
00560 045000*
00561 045100      IF ACTION-IS-CHANGE
00562 045200      OR ACTION-IS-ADD
00563 045300          IF NOT VALID-UPDATE-FIELD
00564 045400              SET EMX TO 3
00565 045500              GENERATE VALIDATE-ERROR-DETAIL
00566 045600              MOVE 'N' TO UPDATE-RECORD-VALID-SW
00567 045700      .

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00568 045800*
00569 045900     IF UPDATE-RECD-VALID AND
00570 046000         (ACTION-IS-CHANGE OR ACTION-IS-ADD)
00571 046100             PERFORM VALIDATE-UPDATE-DATA
00572 046200             THRU VALIDATE-UPDATE-DATA-EXIT
00573 046300     .
00574 046400     IF ACTION-IS-CHANGE
00575 046500     OR ACTION-IS-DELETE
00576 046600         IF READ-INVALID-KEY
00577 046700             SET EMX TO 15
00578 046800             GENERATE VALIDATE-ERROR-DETAIL
00579 046900             ADD 1 TO UNMATCHED-CHANGE-COUNT
00580 047000             MOVE 'N' TO UPDATE-RECORD-VALID-SW
00581 047100         ELSE
00582 047200             NEXT SENTENCE
00583 047300     ELSE
00584 047400         IF NOT READ-INVALID-KEY
00585 047500             SET EMX TO 14
00586 047600             GENERATE VALIDATE-ERROR-DETAIL
00587 047700             ADD 1 TO DUPLICATE-ADD-COUNT
00588 047800             MOVE 'N' TO UPDATE-RECORD-VALID-SW
00589 047900         ELSE
00590 048000             NEXT SENTENCE
00591 048100     .
00592 048200*
00593 048300     IF NOT UPDATE-RECD-VALID
00594 048400         ADD 1 TO ERRONEOUS-UPDATE-COUNT
00595 048500     .
00596 048600*
00597 048700 PROCESS-UPDATE-RECORD-EXIT.
00598 048800     EXIT.
00599 048900*
00600 049000 VALIDATE-UPDATE-DATA.
00601 049100*
00602 049200     IF UPDATE-FIELD-FIRST-NAME
00603 049300         PERFORM VALIDATE-FIRST-NAME
00604 049400         THRU VALIDATE-FIRST-NAME-EXIT
00605 049500     .
00606 049600     IF UPDATE-FIELD-INITIAL
00607 049700         MOVE UPDATE-DATA-INITIAL TO WSUR-INITIAL
00608 049800     .
00609 049900     IF UPDATE-FIELD-LAST-NAME
00610 050000         PERFORM VALIDATE-LAST-NAME
00611 050100         THRU VALIDATE-LAST-NAME-EXIT
00612 050200     .
00613 050300     IF UPDATE-FIELD-STREET
00614 050400         PERFORM VALIDATE-STREET
00615 050500         THRU VALIDATE-STREET-EXIT
00616 050600     .
00617 050700     IF UPDATE-FIELD-CITY
00618 050800         PERFORM VALIDATE-CITY
00619 050900         THRU VALIDATE-CITY-EXIT
00620 051000     .
00621 051100     IF UPDATE-FIELD-GENDER
00622 051200         PERFORM VALIDATE-GENDER
00623 051300         THRU VALIDATE-GENDER-EXIT
00624 051400     .
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00625 051500 IF UPDATE-FIELD-PHONE
00626 051600     PERFORM VALIDATE-PHONE
00627 051700     THRU VALIDATE-PHONE-EXIT
00628 051800 .
00629 051900 IF UPDATE-FIELD-DATE1
00630 052000 OR UPDATE-FIELD-DATE2
00631 052100 OR UPDATE-FIELD-DATE3
00632 052200     PERFORM VALIDATE-DATE
00633 052300     THRU VALIDATE-DATE-EXIT
00634 052400 .
00635 052500*
00636 052600 VALIDATE-UPDATE-DATA-EXIT.
00637 052700     EXIT.
00638 052800*
00639 052900 VALIDATE-FIRST-NAME.
00640 053000*
00641 053100 IF UPDATE-DATA-FIRST-NAME = SPACES
00642 053200     SET EMX TO 4
00643 053300     GENERATE VALIDATE-ERROR-DETAIL
00644 053400     MOVE 'N' TO UPDATE-RECORD-VALID-SW
00645 053500 ELSE
00646 053600     MOVE UPDATE-DATA-FIRST-NAME TO WSUR-FIRST-NAME
00647 053700 .
00648 053800*
00649 053900 VALIDATE-FIRST-NAME-EXIT.
00650 054000     EXIT.
00651 054100*
00652 054200 VALIDATE-LAST-NAME.
00653 054300*
00654 054400 IF UPDATE-DATA-LAST-NAME = SPACES
00655 054500     SET EMX TO 5
00656 054600     GENERATE VALIDATE-ERROR-DETAIL
00657 054700     MOVE 'N' TO UPDATE-RECORD-VALID-SW
00658 054800 ELSE
00659 054900     MOVE UPDATE-DATA-LAST-NAME TO WSUR-LAST-NAME
00660 055000 .
00661 055100*
00662 055200 VALIDATE-LAST-NAME-EXIT.
00663 055300     EXIT.
00664 055400*
00665 055500 VALIDATE-STREET.
00666 055600*
00667 055700 IF UPDATE-DATA-STREET = SPACES
00668 055800     SET EMX TO 6
00669 055900     GENERATE VALIDATE-ERROR-DETAIL
00670 056000     MOVE 'N' TO UPDATE-RECORD-VALID-SW
00671 056100 ELSE
00672 056200     MOVE UPDATE-DATA-STREET TO WSUR-STREET
00673 056300 .
00674 056400*
00675 056500 VALIDATE-STREET-EXIT.
00676 056600     EXIT.
00677 056700*
00678 056800 VALIDATE-CITY.
00679 056900*
00680 057000 IF UPDATE-DATA-CITY = SPACES
00681 057100     SET EMX TO 7
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00682 057200      GENERATE VALIDATE-ERROR-DETAIL
00683 057300      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00684 057400      ELSE
00685 057500      MOVE UPDATE-DATA-CITY TO WSUR-CITY
00686 057600      .
00687 057700*
00688 057800 VALIDATE-CITY-EXIT.
00689 057900      EXIT.
00690 058000*
00691 058100 VALIDATE-GENDER.
00692 058200*
00693 058300      IF UPDATE-DATA-GENDER = 'M'
00694 058400      OR UPDATE-DATA-GENDER = 'F'
00695 058500      MOVE UPDATE-DATA-GENDER TO WSUR-GENDER
00696 058600      ELSE
00697 058700      SET EMX TO 8
00698 058800      GENERATE VALIDATE-ERROR-DETAIL
00699 058900      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00700 059000      .
00701 059100*
00702 059200 VALIDATE-GENDER-EXIT.
00703 059300      EXIT.
00704 059400*
00705 059500 VALIDATE-PHONE.
00706 059600*
00707 059700      IF UPDATE-DATA-PHONE IS NOT NUMERIC
00708 059800      SET EMX TO 9
00709 059900      GENERATE VALIDATE-ERROR-DETAIL
00710 060000      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00711 060100      ELSE
00712 060200      MOVE UPDATE-DATA-PHONE TO WSUR-PHONE
00713 060300      .
00714 060400*
00715 060500 VALIDATE-PHONE-EXIT.
00716 060600      EXIT.
00717 060700*
00718 060800 VALIDATE-DATE.
00719 060900*
00720 061000      MOVE UPDATE-DATA-DATE TO GTOAP-DATE-G.
00721 061100      CALL 'Y2KGTOA' USING GTOA-PARAMETERS.
00722 061200      IF GTOAP-RETURN-CODE = 2
00723 061300      SET EMX TO 10
00724 061400      GENERATE VALIDATE-ERROR-DETAIL
00725 061500      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00726 061600      .
00727 061700      IF GTOAP-RETURN-CODE = 4
00728 061800      SET EMX TO 11
00729 061900      GENERATE VALIDATE-ERROR-DETAIL
00730 062000      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00731 062100      .
00732 062200      IF GTOAP-RETURN-CODE = 6
00733 062300      SET EMX TO 12
00734 062400      GENERATE VALIDATE-ERROR-DETAIL
00735 062500      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00736 062600      .
00737 062700      IF GTOAP-RETURN-CODE = 8
00738 062800      SET EMX TO 13

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00739 062900      GENERATE VALIDATE-ERROR-DETAIL
00740 063000      MOVE 'N' TO UPDATE-RECORD-VALID-SW
00741 063100      .
00742 063200      IF GTOAP-RETURN-CODE = 0
00743 063300      AND UPDATE-FIELD-DATE1
00744 063400      MOVE UPDATE-DATA-DATE TO WSUR-DATE1.
00745 063500      IF GTOAP-RETURN-CODE = 0
00746 063600      AND UPDATE-FIELD-DATE2
00747 063700      MOVE UPDATE-DATA-DATE TO WSUR-DATE2.
00748 063800      IF GTOAP-RETURN-CODE = 0
00749 063900      AND UPDATE-FIELD-DATE3
00750 064000      MOVE UPDATE-DATA-DATE TO WSUR-DATE3.
00751 064100*
00752 064200 VALIDATE-DATE-EXIT.
00753 064300      EXIT.
00754 064400*
00755 064500 PROCESS-UPDATE-SET.
00756 064600*
00757 064700      IF ACTION-IS-CHANGE
00758 064800      OR ACTION-IS-DELETE
00759 064900      IF NOT READ-INVALID-KEY
00760 065000      PERFORM APPLY-UPDATES-TO-MASTER
00761 065100      THRU APPLY-UPDATES-TO-MASTER-EXIT
00762 065200      ELSE
00763 065300      NEXT SENTENCE
00764 065400*      NO ACTION, BECAUSE THIS IS AN ERROR WHICH HAS
00765 065500*      ALREADY BEEN REPORTED
00766 065600      ELSE
00767 065700      IF ACTION-IS-ADD
00768 065800      IF READ-INVALID-KEY
00769 065900      PERFORM ADD-NEW-MASTER
00770 066000      THRU ADD-NEW-MASTER-EXIT
00771 066100      ELSE
00772 066200      NEXT SENTENCE
00773 066300*      NO ACTION, BECAUSE THIS IS AN ERROR WHICH HAS
00774 066400*      ALREADY BEEN REPORTED
00775 066500      .
00776 066600*
00777 066700 PROCESS-UPDATE-SET-EXIT.
00778 066800      EXIT.
00779 066900*
00780 067000 APPLY-UPDATES-TO-MASTER.
00781 067100*
00782 067200      SET DTX TO 1.
00783 067300      GENERATE RECORD-FIELDS-DETAIL.
00784 067400
00785 067500      IF ACTION-IS-DELETE
00786 067600      PERFORM DELETE-VSAM-MASTER-RECORD
00787 067700      THRU DELETE-VSAM-MASTER-RECORD-EXIT
00788 067800      ELSE
00789 067900      PERFORM UPDATE-VSAM-MASTER-FIELDS
00790 068000      THRU UPDATE-VSAM-MASTER-FIELDS-EXIT
00791 068100      SET DTX TO 2
00792 068200      GENERATE RECORD-FIELDS-DETAIL
00793 068300      PERFORM REWRITE-VSAM-MASTER
00794 068400      THRU REWRITE-VSAM-MASTER-EXIT
00795 068500      .

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00796 068600*
00797 068700 APPLY-UPDATES-TO-MASTER-EXIT.
00798 068800     EXIT.
00799 068900*
00800 069000 ADD-NEW-MASTER.
00801 069100*
00802 069200     MOVE SPACES TO MASTER-RECD.
00803 069300     MOVE ZEROS TO MR-TELEPHONE, MR-DATE-1,
00804 069400             MR-DATE-2, MR-DATE-3
00805 069500     MOVE WSUR-ID TO MR-ID
00806 069600     PERFORM UPDATE-VSAM-MASTER-FIELDS
00807 069700             THRU UPDATE-VSAM-MASTER-FIELDS-EXIT.
00808 069800     SET DTX TO 3.
00809 069900     GENERATE RECORD-FIELDS-DETAIL.
00810 070000     PERFORM WRITE-VSAM-MASTER
00811 070100             THRU WRITE-VSAM-MASTER-EXIT.
00812 070200*
00813 070300 ADD-NEW-MASTER-EXIT.
00814 070400     EXIT.
00815 070500*
00816 070600 READ-VSAM-MASTER.
00817 070700*
00818 070800     MOVE 'N' TO READ-INVALID-KEY-SW.
00819 070900     MOVE VSIO-READ TO VSIO-COMMAND.
00820 071000     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00821 071100             MASTER-RECD.
00822 071200*
00823 071300     IF NOT VSIO-SUCCESS
00824 071400         IF VSIO-LOGIC-ERROR
00825 071500         AND VSIO-RECORD-NOT-FOUND
00826 071600             MOVE 'Y' TO READ-INVALID-KEY-SW
00827 071700             MOVE LOW-VALUES TO MASTER-RECD
00828 071800         ELSE
00829 071900             DISPLAY 'VSAMIO ERROR OCCURRED DURING '
00830 072000                 VSIO-COMMAND
00831 072100             EXHIBIT NAMED VSIO-RETURN-CODE,
00832 072200                 EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
00833 072300                 VSIO-VSAM-FUNCTION-CODE,
00834 072400                 VSIO-VSAM-FEEDBACK-CODE
00835 072500     .
00836 072600*
00837 072700 READ-VSAM-MASTER-EXIT.
00838 072800     EXIT.
00839 072900*
00840 073000 REWRITE-VSAM-MASTER.
00841 073100*
00842 073200     MOVE 'N' TO REWRITE-INVALID-KEY-SW.
00843 073300     MOVE VSIO-REWRITE TO VSIO-COMMAND.
00844 073400     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00845 073500             MASTER-RECD.
00846 073600*
00847 073700     IF NOT VSIO-SUCCESS
00848 073800         MOVE 'Y' TO REWRITE-INVALID-KEY-SW
00849 073900         SET EMX TO 16
00850 074000         GENERATE WRITE-ERROR-DETAIL
00851 074100     .
00852 074200     IF NOT REWRITE-INVALID-KEY

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00853 074300      ADD 1 TO CHANGED-RECORD-COUNT
00854 074400      .
00855 074500*
00856 074600 REWRITE-VSAM-MASTER-EXIT.
00857 074700      EXIT.
00858 074800*
00859 074900 WRITE-VSAM-MASTER.
00860 075000*
00861 075100      MOVE 'N' TO WRITE-INVALID-KEY-SW.
00862 075200      MOVE VSIO-WRITE TO VSIO-COMMAND.
00863 075300      CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00864 075400      MASTER-RECD.
00865 075500*
00866 075600      IF NOT VSIO-SUCCESS
00867 075700          MOVE 'Y' TO WRITE-INVALID-KEY-SW
00868 075800          SET EMX TO 17
00869 075900          GENERATE WRITE-ERROR-DETAIL
00870 076000      .
00871 076100      IF NOT WRITE-INVALID-KEY
00872 076200          ADD 1 TO ADDED-RECORD-COUNT
00873 076300      .
00874 076400*
00875 076500 WRITE-VSAM-MASTER-EXIT.
00876 076600      EXIT.
00877 076700*
00878 076800 DELETE-VSAM-MASTER-RECORD.
00879 076900*
00880 077000      MOVE VSIO-DELETE TO VSIO-COMMAND.
00881 077100      CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
00882 077200      MASTER-RECD.
00883 077300*
00884 077400      IF VSIO-SUCCESS
00885 077500          ADD 1 TO DELETED-RECORD-COUNT
00886 077600          SET DTX TO 4
00887 077700          GENERATE RECORD-FIELDS-DETAIL
00888 077800      ELSE
00889 077900          DISPLAY 'VSAMIO ERROR OCCURRED DURING '
00890 078000          VSIO-COMMAND
00891 078100          EXHIBIT NAMED VSIO-RETURN-CODE,
00892 078200          EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
00893 078300          VSIO-VSAM-FUNCTION-CODE,
00894 078400          VSIO-VSAM-FEEDBACK-CODE.
00895 078500*
00896 078600 DELETE-VSAM-MASTER-RECORD-EXIT.
00897 078700      EXIT.
00898 078800*
00899 078900 UPDATE-VSAM-MASTER-FIELDS.
00900 079000*
00901 079100      IF WSUR-FIRST-NAME NOT = LOW-VALUES
00902 079200          MOVE WSUR-FIRST-NAME TO MR-FIRST-NAME.
00903 079300      IF WSUR-INITIAL NOT = LOW-VALUES
00904 079400          MOVE WSUR-INITIAL TO MR-INITIAL.
00905 079500      IF WSUR-LAST-NAME NOT = LOW-VALUES
00906 079600          MOVE WSUR-LAST-NAME TO MR-LAST-NAME.
00907 079700      CALL 'SORTNAME' USING MR-FIRST-NAME, MR-LAST-NAME,
00908 079800          MR-INITIAL, MR-SORT-NAME.
00909 079900      IF WSUR-STREET NOT = LOW-VALUES

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00910	080000	MOVE WSUR-STREET TO MR-STREET.
00911	080100	IF WSUR-CITY NOT = LOW-VALUES
00912	080200	MOVE WSUR-CITY TO MR-CITY-STATE-ZIP.
00913	080300	IF WSUR-GENDER NOT = LOW-VALUES
00914	080400	MOVE WSUR-GENDER TO MR-GENDER-CODE.
00915	080500	IF WSUR-PHONE NOT = LOW-VALUES
00916	080600	MOVE WSUR-PHONE TO MR-TELEPHONE.
00917	080700	IF WSUR-DATE1 NOT = LOW-VALUES
00918	080800	MOVE WSUR-DATE1 TO MR-DATE-1.
00919	080900	IF WSUR-DATE2 NOT = LOW-VALUES
00920	081000	MOVE WSUR-DATE2 TO MR-DATE-2.
00921	081100	IF WSUR-DATE3 NOT = LOW-VALUES
00922	081200	MOVE WSUR-DATE3 TO MR-DATE-3.
00923	081300*	
00924	081400	UPDATE-VSAM-MASTER-FIELDS-EXIT.
00925	081500	EXIT.
00926	081600*	
00927	081700*	END OF PROGRAM VSUPDT.

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=3-053	FD	UPDATE-FILE	DCB=01		DNM=3-053		QSAM				F
DNM=3-080	01	UPDATE-RECD	BL=1	000	DNM=3-080	DS 0CL80	GROUP				
DNM=3-104	02	UPDATE-KEY	BL=1	000	DNM=3-104	DS 0CL8	GROUP				
DNM=3-127	03	UPDATE-ID	BL=1	000	DNM=3-127	DS 7C	DISP				
DNM=3-146	03	UPDATE-ACTION	BL=1	007	DNM=3-146	DS 1C	DISP				
DNM=3-172	88	ACTION-IS-VALID			DNM=3-172						
DNM=3-197	02	UPDATE-FIELD	BL=1	008	DNM=3-197	DS 2C	DISP				
DNM=3-222	88	VALID-UPDATE-FIELD			DNM=3-222						
DNM=3-250	88	UPDATE-FIELD-FIRST-NAME			DNM=3-250						
DNM=3-285	88	UPDATE-FIELD-INITIAL			DNM=3-285						
DNM=3-317	88	UPDATE-FIELD-LAST-NAME			DNM=3-317						
DNM=3-351	88	UPDATE-FIELD-STREET			DNM=3-351						
DNM=3-382	88	UPDATE-FIELD-CITY			DNM=3-382						
DNM=3-411	88	UPDATE-FIELD-GENDER			DNM=3-411						
DNM=3-442	88	UPDATE-FIELD-PHONE			DNM=3-442						
DNM=3-475	88	UPDATE-FIELD-DATE1			DNM=3-475						
DNM=4-000	88	UPDATE-FIELD-DATE2			DNM=4-000						
DNM=4-030	88	UPDATE-FIELD-DATE3			DNM=4-030						
DNM=4-060	02	UPDATE-DATA	BL=1	00A	DNM=4-060	DS 70C	DISP				
DNM=4-081	02	UPDATA-DATA-01	BL=1	00A	DNM=4-081	DS 0CL70	GROUP	R			
DNM=4-108	03	UPDATE-DATA-FIRST-NAME	BL=1	00A	DNM=4-108	DS 15C	DISP				
DNM=4-140	03	FILLER	BL=1	019	DNM=4-140	DS 55C	DISP				
DNM=4-156	02	UPDATA-DATA-02	BL=1	00A	DNM=4-156	DS 0CL70	GROUP	R			
DNM=4-183	03	UPDATE-DATA-INITIAL	BL=1	00A	DNM=4-183	DS 1C	DISP				
DNM=4-212	03	FILLER	BL=1	00B	DNM=4-212	DS 69C	DISP				
DNM=4-231	02	UPDATA-DATA-03	BL=1	00A	DNM=4-231	DS 0CL70	GROUP	R			
DNM=4-258	03	UPDATE-DATA-LAST-NAME	BL=1	00A	DNM=4-258	DS 20C	DISP				
DNM=4-289	03	FILLER	BL=1	01E	DNM=4-289	DS 50C	DISP				
DNM=4-308	02	UPDATA-DATA-04	BL=1	00A	DNM=4-308	DS 0CL70	GROUP	R			
DNM=4-335	03	UPDATE-DATA-STREET	BL=1	00A	DNM=4-335	DS 35C	DISP				
DNM=4-366	03	FILLER	BL=1	02D	DNM=4-366	DS 35C	DISP				
DNM=4-385	02	UPDATA-DATA-05	BL=1	00A	DNM=4-385	DS 0CL70	GROUP	R			
DNM=4-412	03	UPDATE-DATA-CITY	BL=1	00A	DNM=4-412	DS 35C	DISP				
DNM=4-438	03	FILLER	BL=1	02D	DNM=4-438	DS 35C	DISP				
DNM=4-457	02	UPDATA-DATA-06	BL=1	00A	DNM=4-457	DS 0CL70	GROUP	R			
DNM=5-000	03	UPDATE-DATA-GENDER	BL=1	00A	DNM=5-000	DS 1C	DISP				
DNM=5-028	03	FILLER	BL=1	00B	DNM=5-028	DS 69C	DISP				
DNM=5-047	02	UPDATA-DATA-07	BL=1	00A	DNM=5-047	DS 0CL70	GROUP	R			
DNM=5-074	03	UPDATE-DATA-PHONE	BL=1	00A	DNM=5-074	DS 10C	DISP				
DNM=5-101	03	FILLER	BL=1	014	DNM=5-101	DS 60C	DISP				
DNM=5-120	02	UPDATA-DATA-08-10	BL=1	00A	DNM=5-120	DS 0CL70	GROUP	R			
DNM=5-153	03	UPDATE-DATA-DATE	BL=1	00A	DNM=5-153	DS 8C	DISP				
DNM=5-179	03	FILLER	BL=1	012	DNM=5-179	DS 62C	DISP				
DNM=5-198	FD	REPORT-FILE	DCB=02		DNM=5-198		QSAM				F
DNM=5-222	01	-0001	BL=2	000	DNM=5-222	DS 133C	DISP				
DNM=5-237	01	SWITCHES-FOR-TESTS	BL=3	000	DNM=5-237	DS 0CL5	GROUP				
DNM=5-268	02	UPDATE-FILE-END-SWITCH	BL=3	000	DNM=5-268	DS 1C	DISP				
DNM=5-303	88	UPDATE-FILE-END			DNM=5-303						
DNM=5-329	02	UPDATE-RECORD-VALID-SW	BL=3	001	DNM=5-329	DS 1C	DISP				
DNM=5-364	88	UPDATE-RECD-VALID			DNM=5-364						
DNM=5-392	02	READ-INVALID-KEY-SW	BL=3	002	DNM=5-392	DS 1C	DISP				
DNM=5-424	88	READ-INVALID-KEY			DNM=5-424						
DNM=5-451	02	REWRITE-INVALID-KEY-SW	BL=3	003	DNM=5-451	DS 1C	DISP				
DNM=6-000	88	REWRITE-INVALID-KEY			DNM=6-000						
DNM=6-030	02	WRITE-INVALID-KEY-SW	BL=3	004	DNM=6-030	DS 1C	DISP				

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=6-063	88	WRITE-INVALID-KEY			DNM=6-063						
DNM=6-091	01	RECORD-COUNTERS	BL=3	008	DNM=6-091	DS 0CL21	GROUP				
DNM=6-119	02	UPDATE-RECORD-COUNT	BL=3	008	DNM=6-119	DS 3P	COMP-3				
DNM=6-148	02	ERRONEOUS-UPDATE-COUNT	BL=3	00B	DNM=6-148	DS 3P	COMP-3				
DNM=6-180	02	CHANGED-RECORD-COUNT	BL=3	00E	DNM=6-180	DS 3P	COMP-3				
DNM=6-210	02	DELETED-RECORD-COUNT	BL=3	011	DNM=6-210	DS 3P	COMP-3				
DNM=6-240	02	ADDED-RECORD-COUNT	BL=3	014	DNM=6-240	DS 3P	COMP-3				
DNM=6-268	02	UNMATCHED-CHANGE-COUNT	BL=3	017	DNM=6-268	DS 3P	COMP-3				
DNM=6-300	02	DUPLICATE-ADD-COUNT	BL=3	01A	DNM=6-300	DS 3P	COMP-3				
DNM=6-329	01	WS-UPDATE-RECORD	BL=3	020	DNM=6-329	DS 0CL149	GROUP				
DNM=6-358	02	WSUR-KEY	BL=3	020	DNM=6-358	DS 0CL8	GROUP				
DNM=6-379	03	WSUR-ID	BL=3	020	DNM=6-379	DS 7C	DISP				
DNM=6-396	03	WSUR-ACTION	BL=3	027	DNM=6-396	DS 1C	DISP				
DNM=6-420	88	ACTION-IS-CHANGE			DNM=6-420						
DNM=6-450	88	ACTION-IS-ADD			DNM=6-450						
DNM=6-474	88	ACTION-IS-DELETE			DNM=6-474						
DNM=7-000	02	WSUR-FIRST-NAME	BL=3	028	DNM=7-000	DS 15C	DISP				
DNM=7-025	02	WSUR-INITIAL	BL=3	037	DNM=7-025	DS 1C	DISP				
DNM=7-047	02	WSUR-LAST-NAME	BL=3	038	DNM=7-047	DS 20C	DISP				
DNM=7-074	02	WSUR-STREET	BL=3	04C	DNM=7-074	DS 35C	DISP				
DNM=7-095	02	WSUR-CITY	BL=3	06F	DNM=7-095	DS 35C	DISP				
DNM=7-114	02	WSUR-GENDER	BL=3	092	DNM=7-114	DS 1C	DISP				
DNM=7-135	02	WSUR-PHONE	BL=3	093	DNM=7-135	DS 10C	DISP				
DNM=7-155	02	WSUR-DATE1	BL=3	09D	DNM=7-155	DS 8C	DISP				
DNM=7-178	02	WSUR-DATE2	BL=3	0A5	DNM=7-178	DS 8C	DISP				
DNM=7-198	02	WSUR-DATE3	BL=3	0AD	DNM=7-198	DS 8C	DISP				
DNM=7-218	01	VSIO-PARAMETER-VALUES	BL=3	0B8	DNM=7-218	DS 0CL124	GROUP				
DNM=7-255	02	VSIO-OPEN	BL=3	0B8	DNM=7-255	DS 8C	DISP				
DNM=7-274	02	VSIO-CLOSE	BL=3	0C0	DNM=7-274	DS 8C	DISP				
DNM=7-294	02	VSIO-READ	BL=3	0C8	DNM=7-294	DS 8C	DISP				
DNM=7-316	02	VSIO-WRITE	BL=3	0D0	DNM=7-316	DS 8C	DISP				
DNM=7-336	02	VSIO-REWRITE	BL=3	0D8	DNM=7-336	DS 8C	DISP				
DNM=7-358	02	VSIO-DELETE	BL=3	0E0	DNM=7-358	DS 8C	DISP				
DNM=7-382	02	VSIO-START-KEY-EQUAL	BL=3	0E8	DNM=7-382	DS 8C	DISP				
DNM=7-412	02	VSIO-START-KEY-NOTLESS	BL=3	0F0	DNM=7-412	DS 8C	DISP				
DNM=7-444	02	VSIO-KSDS	BL=3	0F8	DNM=7-444	DS 4C	DISP				
DNM=7-463	02	VSIO-ESDS	BL=3	0FC	DNM=7-463	DS 4C	DISP				
DNM=7-482	02	VSIO-RRDS	BL=3	100	DNM=7-482	DS 4C	DISP				
DNM=8-000	02	VSIO-SEQUENTIAL	BL=3	104	DNM=8-000	DS 10C	DISP				
DNM=8-025	02	VSIO-DIRECT	BL=3	10E	DNM=8-025	DS 10C	DISP				
DNM=8-046	02	VSIO-DYNAMIC	BL=3	118	DNM=8-046	DS 10C	DISP				
DNM=8-068	02	VSIO-INPUT	BL=3	122	DNM=8-068	DS 6C	DISP				
DNM=8-088	02	VSIO-OUTPUT	BL=3	128	DNM=8-088	DS 6C	DISP				
DNM=8-109	02	VSIO-INPUT-OUTPUT	BL=3	12E	DNM=8-109	DS 6C	DISP				
DNM=8-136	01	VSIO-PARAMETER-BLOCK	BL=3	138	DNM=8-136	DS 0CL16	GROUP				
DNM=8-169	02	VSIO-COMMAND	BL=3	138	DNM=8-169	DS 8C	DISP				
DNM=8-191	02	VSIO-RETURN-CODE	BL=3	140	DNM=8-191	DS 2C	COMP				
DNM=8-220	88	VSIO-SUCCESS			DNM=8-220						
DNM=8-245	88	VSIO-LOGIC-ERROR			DNM=8-245						
DNM=8-274	88	VSIO-END-OF-FILE			DNM=8-274						
DNM=8-305	88	VSIO-PARAMETER-ERROR			DNM=8-305						
DNM=8-338	88	VSIO-COMMAND-UNKNOWN			DNM=8-338						
DNM=8-372	88	VSIO-DATASET-ALREADY-OPEN			DNM=8-372						
DNM=8-414	88	VSIO-DATASET-NOT-OPEN			DNM=8-414						
DNM=8-449	88	VSIO-ORGANIZATION-KEYWORD			DNM=8-449						

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=9-000	88	VSIO-ACCESS-KEYWORD			DNM=9-000						
DNM=9-033	88	VSIO-ACCESS-UNSUPPORTED			DNM=9-033						
DNM=9-070	88	VSIO-MODE-KEYWORD			DNM=9-070						
DNM=9-101	88	VSIO-MODE-UNSUPPORTED			DNM=9-101						
DNM=9-136	88	VSIO-DDNAME-BLANK			DNM=9-136						
DNM=9-167	02	VSIO-VSAM-RETURN-CODE	BL=3	142	DNM=9-167	DS 2C	COMP				
DNM=9-198	02	VSIO-VSAM-FUNCTION-CODE	BL=3	144	DNM=9-198	DS 2C	COMP				
DNM=9-231	02	VSIO-VSAM-FEEDBACK-CODE	BL=3	146	DNM=9-231	DS 2C	COMP				
DNM=9-267	88	VSIO-DUPLICATE-RECORD			DNM=9-267						
DNM=9-301	88	VSIO-SEQUENCE-ERROR			DNM=9-301						
DNM=9-334	88	VSIO-RECORD-NOT-FOUND			DNM=9-334						
DNM=9-369	88	VSIO-NO-MORE-SPACE			DNM=9-369						
DNM=9-404	88	VSIO-READ-WITHOUT-START			DNM=9-404						
DNM=9-444	01	KSDSF01	BL=3	148	DNM=9-444	DS 0CL196	GROUP				
DNM=9-467	02	VSIO-DDNAME	BL=3	148	DNM=9-467	DS 8C	DISP				
DNM=10-000	02	VSIO-ORGANIZATION	BL=3	150	DNM=10-000	DS 4C	DISP				
DNM=10-030	02	VSIO-ACCESS	BL=3	154	DNM=10-030	DS 10C	DISP				
DNM=10-051	02	VSIO-MODE	BL=3	15E	DNM=10-051	DS 6C	DISP				
DNM=10-073	02	VSIO-RECORD-LENGTH	BL=3	164	DNM=10-073	DS 2C	COMP				
DNM=10-101	02	VSIO-KEY-ARGUMENT	BL=3	166	DNM=10-101	DS 0CL4	GROUP				
DNM=10-131	03	VSIO-KEY-POSITION	BL=3	166	DNM=10-131	DS 2C	COMP				
DNM=10-161	03	VSIO-KEY-LENGTH	BL=3	168	DNM=10-161	DS 2C	COMP				
DNM=10-189	02	VSIO-RELATIVE-RECORD	BL=3	166	DNM=10-189	DS 4C	COMP	R			
DNM=10-219	02	FILLER	BL=3	16A	DNM=10-219	DS 1C	DISP				
DNM=10-241	88	VSIO-FILE-OPEN			DNM=10-241						
DNM=10-266	88	VSIO-FILE-CLOSED			DNM=10-266						
DNM=10-293	02	FILLER	BL=3	16B	DNM=10-293	DS 161C	DISP				
DNM=10-312	01	MASTER-RECD	BL=3	210	DNM=10-312	DS 0CL200	GROUP				
DNM=10-336	02	MR-DELETE-CODE	BL=3	210	DNM=10-336	DS 1C	DISP				
DNM=10-363	02	MR-ID	BL=3	211	DNM=10-363	DS 7C	DISP-NM				
DNM=10-378	02	MR-FIRST-NAME	BL=3	218	DNM=10-378	DS 15C	DISP				
DNM=10-401	02	MR-INITIAL	BL=3	227	DNM=10-401	DS 1C	DISP				
DNM=10-421	02	MR-LAST-NAME	BL=3	228	DNM=10-421	DS 20C	DISP				
DNM=10-443	02	MR-STREET	BL=3	23C	DNM=10-443	DS 35C	DISP				
DNM=10-465	02	MR-CITY-STATE-ZIP	BL=3	25F	DNM=10-465	DS 35C	DISP				
DNM=11-000	02	MR-GENDER-CODE	BL=3	282	DNM=11-000	DS 1C	DISP				
DNM=11-024	02	MR-TELEPHONE	BL=3	283	DNM=11-024	DS 10C	DISP				
DNM=11-049	02	FILLER	BL=3	283	DNM=11-049	DS 0CL10	GROUP	R			
DNM=11-071	03	MR-TELEPHONE-A	BL=3	283	DNM=11-071	DS 3C	DISP-NM				
DNM=11-095	03	MR-TELEPHONE-P	BL=3	286	DNM=11-095	DS 3C	DISP-NM				
DNM=11-119	03	MR-TELEPHONE-N	BL=3	289	DNM=11-119	DS 4C	DISP-NM				
DNM=11-143	02	MR-DATE-1	BL=3	28D	DNM=11-143	DS 8C	DISP				
DNM=11-165	02	FILLER	BL=3	28D	DNM=11-165	DS 0CL8	GROUP	R			
DNM=11-187	03	MR-DATE-1M	BL=3	28D	DNM=11-187	DS 2C	DISP-NM				
DNM=11-210	03	MR-DATE-1D	BL=3	28F	DNM=11-210	DS 2C	DISP-NM				
DNM=11-230	03	MR-DATE-1Y	BL=3	291	DNM=11-230	DS 4C	DISP-NM				
DNM=11-253	02	MR-DATE-2	BL=3	295	DNM=11-253	DS 8C	DISP				
DNM=11-275	02	FILLER	BL=3	295	DNM=11-275	DS 0CL8	GROUP	R			
DNM=11-297	03	MR-DATE-2M	BL=3	295	DNM=11-297	DS 2C	DISP-NM				
DNM=11-317	03	MR-DATE-2D	BL=3	297	DNM=11-317	DS 2C	DISP-NM				
DNM=11-340	03	MR-DATE-2Y	BL=3	299	DNM=11-340	DS 4C	DISP-NM				
DNM=11-360	02	MR-DATE-3	BL=3	29D	DNM=11-360	DS 8C	DISP				
DNM=11-382	02	FILLER	BL=3	29D	DNM=11-382	DS 0CL8	GROUP	R			
DNM=11-404	03	MR-DATE-3M	BL=3	29D	DNM=11-404	DS 2C	DISP-NM				
DNM=11-424	03	MR-DATE-3D	BL=3	29F	DNM=11-424	DS 2C	DISP-NM				

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=11-444	03	MR-DATE-3Y	BL=3	2A1	DNM=11-444	DS 4C	DISP-NM				
DNM=11-464	02	MR-SORT-NAME	BL=3	2A5	DNM=11-464	DS 36C	DISP				
DNM=11-486	02	FILLER	BL=3	2C9	DNM=11-486	DS 15C	DISP				
DNM=12-000	01	ERROR-MESSAGES	BL=3	2D8	DNM=12-000	DS 0CL850	GROUP				
DNM=12-027	02	FILLER	BL=3	2D8	DNM=12-027	DS 50C	DISP				
DNM=12-046	02	FILLER	BL=3	30A	DNM=12-046	DS 50C	DISP				
DNM=12-065	02	FILLER	BL=3	33C	DNM=12-065	DS 50C	DISP				
DNM=12-084	02	FILLER	BL=3	36E	DNM=12-084	DS 50C	DISP				
DNM=12-103	02	FILLER	BL=3	3A0	DNM=12-103	DS 50C	DISP				
DNM=12-122	02	FILLER	BL=3	3D2	DNM=12-122	DS 50C	DISP				
DNM=12-141	02	FILLER	BL=3	404	DNM=12-141	DS 50C	DISP				
DNM=12-160	02	FILLER	BL=3	436	DNM=12-160	DS 50C	DISP				
DNM=12-179	02	FILLER	BL=3	468	DNM=12-179	DS 50C	DISP				
DNM=12-198	02	FILLER	BL=3	49A	DNM=12-198	DS 50C	DISP				
DNM=12-217	02	FILLER	BL=3	4CC	DNM=12-217	DS 50C	DISP				
DNM=12-236	02	FILLER	BL=3	4FE	DNM=12-236	DS 50C	DISP				
DNM=12-255	02	FILLER	BL=3	530	DNM=12-255	DS 50C	DISP				
DNM=12-274	02	FILLER	BL=3	562	DNM=12-274	DS 50C	DISP				
DNM=12-293	02	FILLER	BL=3	594	DNM=12-293	DS 50C	DISP				
DNM=12-312	02	FILLER	BL=3	5C6	DNM=12-312	DS 50C	DISP				
DNM=12-331	02	FILLER	BL=3	5F8	DNM=12-331	DS 50C	DISP				
DNM=12-350	01	ERROR-MESSAGE-TABLE	BL=3	2D8	DNM=12-350	DS 0CL850	GROUP	R			
DNM=12-382		EMX			DNM=12-382		INDEX-NM				
DNM=12-392	02	ERROR-MESSAGE-TEXT	BL=3	2D8	DNM=12-392	DS 50C	DISP		0		
DNM=12-420	01	DETAIL-TYPES	BL=3	630	DNM=12-420	DS 0CL36	GROUP				
DNM=12-445	02	FILLER	BL=3	630	DNM=12-445	DS 9C	DISP				
DNM=12-464	02	FILLER	BL=3	639	DNM=12-464	DS 9C	DISP				
DNM=12-483	02	FILLER	BL=3	642	DNM=12-483	DS 9C	DISP				
DNM=13-000	02	FILLER	BL=3	64B	DNM=13-000	DS 9C	DISP				
DNM=13-019	01	DETAIL-TYPES-TABLE	BL=3	630	DNM=13-019	DS 0CL36	GROUP	R			
DNM=13-053		DTX			DNM=13-053		INDEX-NM				
DNM=13-063	02	DETAIL-TYPE	BL=3	630	DNM=13-063	DS 9C	DISP		0		
DNM=13-084	01	GTOA-PARAMETERS	BL=3	658	DNM=13-084	DS 0CL42	GROUP				
DNM=13-112	02	GTOAP-DATE-G	BL=3	658	DNM=13-112	DS 8C	DISP				
DNM=13-137	02	GTOAP-RETURN-CODE	BL=3	660	DNM=13-137	DS 1C	DISP-NM				
DNM=13-167	02	GTOAP-ANUM	BL=3	661	DNM=13-167	DS 7C	DISP-NM				
DNM=13-187	02	FILLER	BL=3	668	DNM=13-187	DS 26C	DISP				
DNM=13-206	01	PRINT-SWITCH	BL=3	688	DNM=13-206	DS 1C	DISP-NM				
DNM=13-231	RD	UPDATE-REPORT			DNM=13-231						
DNM=13-256	01	CTL.LVL	BL=3	690	DNM=13-256	DS 2P	COMP-3				
DNM=13-273	01	TER.COD	BL=3	698	DNM=13-273	DS 1C	DISP				
DNM=13-290	01	FRS.GEN	BL=3	6A0	DNM=13-290	DS 1C	DISP				
DNM=13-307	01	LIN.SAV	BL=3	6A8	DNM=13-307	DS 2C	COMP				
DNM=13-324	01	FRS.GRP	BL=3	6B0	DNM=13-324	DS 1C	DISP				
DNM=13-344	01	ABS.LIN	BL=3	6B8	DNM=13-344	DS 2C	COMP				
DNM=13-361	01	LIN.NUM	BL=3	6C0	DNM=13-361	DS 2P	COMP-3				
DNM=13-381	01	LINE-COUNTER	BL=3	6C8	DNM=13-381	DS 3P	COMP-3				
DNM=13-403	01	PAGE-COUNTER	BL=3	6D0	DNM=13-403	DS 3P	COMP-3				
DNM=13-425	01	RPT.RCD	BL=3	6D8	DNM=13-425	DS 0CL133	GROUP				
DNM=13-445	02	CTL.CHR	BL=3	6D8	DNM=13-445	DS 1C	DISP				
DNM=13-462	02	RPT.LIN	BL=3	6D9	DNM=13-462	DS 132C	DISP				
DNM=13-479	02	E.0001	BL=3	6D9	DNM=13-479	DS 60C	DISP	R			
DNM=14-000	02	E.0002	BL=3	70A	DNM=14-000	DS 50C	DISP	R			
DNM=14-016	02	E.0003	BL=3	6D9	DNM=14-016	DS 1C	DISP	R			
DNM=14-035	02	E.0004	BL=3	6DB	DNM=14-035	DS 7C	DISP-NM	R			

INTRNL NAME	LVL	SOURCE	NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=14-054	02	E.0005		BL=3	6E3	DNM=14-054	DS 15C	DISP	R			
DNM=14-070	02	E.0006		BL=3	6F3	DNM=14-070	DS 1C	DISP	R			
DNM=14-086	02	E.0007		BL=3	6F5	DNM=14-086	DS 20C	DISP	R			
DNM=14-102	02	E.0008		BL=3	70A	DNM=14-102	DS 35C	DISP	R			
DNM=14-118	02	E.0009		BL=3	72E	DNM=14-118	DS 1C	DISP	R			
DNM=14-134	02	E.0010		BL=3	730	DNM=14-134	DS 1C	DISP	R			
DNM=14-150	02	E.0011		BL=3	731	DNM=14-150	DS 3C	DISP-NM	R			
DNM=14-169	02	E.0012		BL=3	734	DNM=14-169	DS 1C	DISP	R			
DNM=14-185	02	E.0013		BL=3	735	DNM=14-185	DS 3C	DISP-NM	R			
DNM=14-201	02	E.0014		BL=3	738	DNM=14-201	DS 1C	DISP	R			
DNM=14-220	02	E.0015		BL=3	739	DNM=14-220	DS 4C	DISP-NM	R			
DNM=14-239	02	E.0016		BL=3	73E	DNM=14-239	DS 2C	DISP-NM	R			
DNM=14-258	02	E.0017		BL=3	740	DNM=14-258	DS 1C	DISP	R			
DNM=14-277	02	E.0018		BL=3	741	DNM=14-277	DS 2C	DISP-NM	R			
DNM=14-293	02	E.0019		BL=3	743	DNM=14-293	DS 1C	DISP	R			
DNM=14-312	02	E.0020		BL=3	744	DNM=14-312	DS 4C	DISP-NM	R			
DNM=14-328	02	E.0021		BL=3	749	DNM=14-328	DS 2C	DISP-NM	R			
DNM=14-344	02	E.0022		BL=3	74B	DNM=14-344	DS 1C	DISP	R			
DNM=14-360	02	E.0023		BL=3	74C	DNM=14-360	DS 2C	DISP-NM	R			
DNM=14-379	02	E.0024		BL=3	74E	DNM=14-379	DS 1C	DISP	R			
DNM=14-398	02	E.0025		BL=3	74F	DNM=14-398	DS 4C	DISP-NM	R			
DNM=14-414	02	E.0026		BL=3	754	DNM=14-414	DS 9C	DISP	R			
DNM=14-433	02	E.0027		BL=3	6E3	DNM=14-433	DS 36C	DISP	R			
DNM=14-449	02	E.0028		BL=3	70A	DNM=14-449	DS 35C	DISP	R			
DNM=14-465	02	E.0029		BL=3	73E	DNM=14-465	DS 2C	DISP-NM	R			
DNM=14-481	02	E.0030		BL=3	740	DNM=14-481	DS 1C	DISP	R			
DNM=15-000	02	E.0031		BL=3	741	DNM=15-000	DS 2C	DISP-NM	R			
DNM=15-019	02	E.0032		BL=3	743	DNM=15-019	DS 1C	DISP	R			
DNM=15-035	02	E.0033		BL=3	744	DNM=15-035	DS 4C	DISP-NM	R			
DNM=15-051	02	E.0034		BL=3	6D9	DNM=15-051	DS 7C	DISP	R			
DNM=15-067	02	E.0035		BL=3	6E2	DNM=15-067	DS 50C	DISP	R			
DNM=15-083	02	E.0036		BL=3	6D9	DNM=15-083	DS 6C	NM-EDIT	R			
DNM=15-110	02	E.0037		BL=3	6E0	DNM=15-110	DS 50C	DISP	R			
DNM=15-129	02	E.0038		BL=3	6D9	DNM=15-129	DS 6C	NM-EDIT	R			
DNM=15-156	02	E.0039		BL=3	6E0	DNM=15-156	DS 50C	DISP	R			
DNM=15-175	02	E.0040		BL=3	6D9	DNM=15-175	DS 6C	NM-EDIT	R			
DNM=15-205	02	E.0041		BL=3	6E0	DNM=15-205	DS 50C	DISP	R			
DNM=15-221	02	E.0042		BL=3	6D9	DNM=15-221	DS 6C	NM-EDIT	R			
DNM=15-248	02	E.0043		BL=3	6E0	DNM=15-248	DS 50C	DISP	R			
DNM=15-267	02	E.0044		BL=3	6D9	DNM=15-267	DS 6C	NM-EDIT	R			
DNM=15-297	02	E.0045		BL=3	6E0	DNM=15-297	DS 50C	DISP	R			
DNM=15-313	02	E.0046		BL=3	6D9	DNM=15-313	DS 6C	NM-EDIT	R			
DNM=15-340	02	E.0047		BL=3	6E0	DNM=15-340	DS 50C	DISP	R			
DNM=15-356	02	E.0048		BL=3	6D9	DNM=15-356	DS 6C	NM-EDIT	R			
DNM=15-383	02	E.0049		BL=3	6E0	DNM=15-383	DS 50C	DISP	R			
DNM=15-402	01	N.0001		BL=3	760	DNM=15-402	DS 2C	COMP				
DNM=15-421	01	N.0002		BL=3	768	DNM=15-421	DS 2C	COMP				
DNM=15-440	01	N.0003		BL=3	770	DNM=15-440	DS 2C	COMP				
DNM=15-459	01	GRP.IND		BL=3	778	DNM=15-459	DS 0CL1	GROUP				
DNM=15-479	02	GP.0000		BL=3	778	DNM=15-479	DS 1C	DISP				

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*STATISTICS*      SOURCE RECORDS =   925      DATA DIVISION STATEMENTS =   207      PROCEDURE DIVISION STATEMENTS =   255
*OPTIONS IN EFFECT*  SIZE = 2097152  BUF = 1048576  LINECNT = 57  SPACE1, FLAGW,   SEQ,   SOURCE
*OPTIONS IN EFFECT*      DMAP, NOPMAP, NOCLIST,   SUPMAP, NOXREF,   LOAD, NODECK, APOST, NOTRUNC,   LIB, NOVERB
*OPTIONS IN EFFECT*      ZWB
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CARD	ERROR MESSAGE						
486	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
507	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
519	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
524	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
545	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
553	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
559	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
567	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
573	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
591	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
595	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
605	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
608	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
612	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
616	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
620	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
624	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
628	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
634	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
647	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
660	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
673	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
686	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
700	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
713	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
726	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
731	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
736	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
741	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
775	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
795	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
835	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
851	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
854	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
870	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.
873	IKF1080I-W	PERIOD	PRECEDED	BY	SPACE.	ASSUME	END OF SENTENCE.

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00001 000100 IDENTIFICATION DIVISION.
00002 000200 PROGRAM-ID. SORTNAME.
00003 000300 AUTHOR. JAY MOSELEY.
00004 000400 DATE-WRITTEN. DECEMBER, 2021.
00005 000500 DATE-COMPILED. DEC 29, 2021
00006 000600 REMARKS. BUILDS SORT NAME FIELD FROM PASSED FIRST NAME,
00007 000700          LAST NAME, MIDDLE INITIAL.
00008 000800*
00009 000900 ENVIRONMENT DIVISION.
00010 001000 CONFIGURATION SECTION.
00011 001100 SOURCE-COMPUTER. IBM-370.
00012 001200 OBJECT-COMPUTER. IBM-370.
00013 001300 INPUT-OUTPUT SECTION.
00014 001400 FILE-CONTROL.
00015 001500*
00016 001600 DATA DIVISION.
00017 001700 FILE SECTION.
00018 001800*
00019 001900 WORKING-STORAGE SECTION.
00020 002000 01  WS-FIRST-NAME          PIC X(16).
00021 002100 01  FILLER                  REDEFINES WS-FIRST-NAME.
00022 002200      02  WS-FIRST-CHAR          OCCURS 16 TIMES
00023 002300                                INDEXED BY FN-X
00024 002400                                PIC X.
00025 002500 01  WS-LAST-NAME              PIC X(21).
00026 002600 01  FILLER                    REDEFINES WS-LAST-NAME.
00027 002700      02  WS-LAST-CHAR          OCCURS 21 TIMES
00028 002800                                INDEXED BY LN-X
00029 002900                                PIC X.
00030 003000*
00031 003100 LINKAGE SECTION.
00032 003200 01  FIRST-NAME                PIC X(15).
00033 003300 01  LAST-NAME                 PIC X(20).
00034 003400 01  MIDDLE-INITIAL            PIC X.
00035 003500 01  SORT-NAME                PIC X(36).
00036 003600 01  FILLER                    REDEFINES SORT-NAME.
00037 003700      02  SN-CHAR              OCCURS 36 TIMES
00038 003800                                INDEXED BY SN-X
00039 003900                                PIC X.
00040 004000*
00041 004100 PROCEDURE DIVISION USING FIRST-NAME, LAST-NAME,
00042 004200          MIDDLE-INITIAL, SORT-NAME.
00043 004300*
00044 004400 BUILD-SORT-NAME.
00045 004500*
00046 004600      MOVE FIRST-NAME TO WS-FIRST-NAME.
00047 004700      MOVE LAST-NAME TO WS-LAST-NAME.
00048 004800      MOVE SPACES TO SORT-NAME.
00049 004900      SET LN-X, FN-X, SN-X TO 1.
00050 005000      PERFORM MOVE-LAST-NAME
00051 005100          THRU MOVE-LAST-NAME-EXIT
00052 005200          UNTIL WS-LAST-CHAR (LN-X) = SPACE
00053 005300              AND WS-LAST-CHAR (LN-X + 1) = SPACE.
00054 005400      PERFORM MOVE-FIRST-NAME

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00055 005500      THRU MOVE-FIRST-NAME-EXIT
00056 005600      UNTIL WS-FIRST-CHAR (FN-X) = SPACE
00057 005700      AND WS-FIRST-CHAR (FN-X + 1) = SPACE.
00058 005800      MOVE MIDDLE-INITIAL TO SN-CHAR (SN-X).
00059 005900*
00060 006000      GOBACK.
00061 006100*
00062 006200 MOVE-LAST-NAME.
00063 006300*
00064 006400      MOVE WS-LAST-CHAR (LN-X) TO SN-CHAR (SN-X).
00065 006500      SET LN-X, SN-X UP BY 1.
00066 006600*
00067 006700 MOVE-LAST-NAME-EXIT.
00068 006800      EXIT.
00069 006900*
00070 007000 MOVE-FIRST-NAME.
00071 007100*
00072 007200      MOVE WS-FIRST-CHAR (FN-X) TO SN-CHAR (SN-X).
00073 007300      SET FN-X, SN-X UP BY 1.
00074 007400*
00075 007500 MOVE-FIRST-NAME-EXIT.
00076 007600      EXIT.
00077 007700*
00078 007800* END OF PROGRAM SORTNAME.
```

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	0	Q	M
DNM=1-150	01	WS-FIRST-NAME	BL=1	000	DNM=1-150	DS 16C	DISP				
DNM=1-173	01	FILLER	BL=1	000	DNM=1-173	DS 0CL16	GROUP	R			
DNM=1-192		FN-X			DNM=1-192		INDEX-NM				
DNM=1-203	02	WS-FIRST-CHAR	BL=1	000	DNM=1-203	DS 1C	DISP		0		
DNM=1-226	01	WS-LAST-NAME	BL=1	010	DNM=1-226	DS 21C	DISP				
DNM=1-248	01	FILLER	BL=1	010	DNM=1-248	DS 0CL21	GROUP	R			
DNM=1-270		LN-X			DNM=1-270		INDEX-NM				
DNM=1-284	02	WS-LAST-CHAR	BL=1	010	DNM=1-284	DS 1C	DISP		0		
DNM=1-306	01	FIRST-NAME	BLL=3	000	DNM=1-306	DS 15C	DISP				
DNM=1-326	01	LAST-NAME	BLL=4	000	DNM=1-326	DS 20C	DISP				
DNM=1-345	01	MIDDLE-INITIAL	BLL=5	000	DNM=1-345	DS 1C	DISP				
DNM=1-369	01	SORT-NAME	BLL=6	000	DNM=1-369	DS 36C	DISP				
DNM=1-391	01	FILLER	BLL=6	000	DNM=1-391	DS 0CL36	GROUP	R			
DNM=1-413		SN-X			DNM=1-413		INDEX-NM				
DNM=1-424	02	SN-CHAR	BLL=6	000	DNM=1-424	DS 1C	DISP		0		

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*STATISTICS*      SOURCE RECORDS =      78      DATA DIVISION STATEMENTS =      12      PROCEDURE DIVISION STATEMENTS =      14
*OPTIONS IN EFFECT*  SIZE = 2097152  BUF = 1048576  LINECNT = 57  SPACE1, FLAGW,  SEQ,  SOURCE
*OPTIONS IN EFFECT*      DMAP, NOPMAP, NOCLIST,  SUPMAP, NOXREF,  LOAD, NODECK, APOST, NOTRUNC, NOLIB, NOVERB
*OPTIONS IN EFFECT*      ZWB
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SYMBOL	TYPE	ID	ADDR	LENGTH	LDID	ASM 0201 13.38 12/29/21
Y2KGTOA	SD	0001	000000	0002DF		

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE STATEMENT	ASM 0201 13.38 12/29/21
2	*					* 00020000
3	*	YY	YY	222	KK KK GGGGG TTTTTTTT 00000 A	* 00030000
4	*	YY	YY	2 2	KK KK GG GG TT 00 00 AAA	* 00040000
5	*	YY	YY	2	KK KK GG GG TT 00 00 AA AA	* 00050000
6	*	YY	YY	2	KKKK GG TT 00 00 AA AA	* 00060000
7	*	YYY		222	KKKK GG GGG TT 00 00 AA AA	* 00070000
8	*	YY		2	KK KK GG GG TT 00 00 AAAAAA	* 00080000
9	*	YY		2	KK KK GG GG TT 00 00 AA AA	* 00090000
10	*	YY		22222	KK KK GGGGG TT 00000 AA AA	* 00100000
11	*					* 00110000
12	*	*****				* 00120000
13	*	*****				* 00130000
14	*	THIS SUBROUTINE COMPUTES THE ASTRONOMICAL NUMBER FOR A				* 00140000
15	*	GIVEN GREGORIAN DATE (MMDDYYYY)				* 00150000
16	*					* 00160000
17	*	1. VALID INPUT YEARS FOR THIS ROUTINE ARE THE YEARS 1601				* 00170000
18	*	THROUGH 3399 A. D. (INCLUSIVE)				* 00180000
19	*					* 00190000
20	*	2. VALID INPUT MONTH VALUES FOR THIS ROUTINE ARE 01 THROUGH 12.				* 00200000
21	*					* 00210000
22	*	3. VALID INPUT DAY VALUES FOR THIS ROUTINE ARE 01 THROUGH 31				* 00220000
23	*	WITH EXCEPTIONS FOR THE MONTHS LISTED:				* 00230000
24	*	MONTH MAXIMUM DAY VALUE				* 00240000
25	*	04 30				* 00250000
26	*	06 30				* 00260000
27	*	09 30				* 00270000
28	*	11 30				* 00280000
29	*	02 28				* 00290000
30	*	02 DURING LEAP YEAR 29				* 00300000
31	*					* 00310000
32	*	4. THE DATE FORMAT MUST BE MMDDYYYY, WHERE MM = THE 2 DIGIT				* 00320000
33	*	MONTH VALUE, DD = THE 2 DIGIT DAY VALUE, AND YYYY = THE				* 00330000
34	*	4 DIGIT YEAR VALUE.				* 00340000
35	*					* 00350000
36	*	5. THREE FIELDS ARE PASSED AS PARAMETERS TO THE ROUTINE:				* 00360000
37	*	1) AN 8 BYTE FIELD CONTAINING THE DATE (IN ZONED-				* 00370000
38	*	DECIMAL FORMAT) FOR WHICH THE ASTRONOMICAL NUMBER IS				* 00380000
39	*	TO BE CALCULATED,				* 00390000
40	*	2) A 1 BYTE ZONED-DECIMAL RETURN CODE, AND				* 00400000
41	*	3) A 7 BYTE FIELD WHICH WILL RECEIVE THE ASTRONOMICAL				* 00410000
42	*	NUMBER (IN ZONED-DECIMAL FORMAT).				* 00420000
43	*	THE ROUTINE WILL NOT ALTER THE DATE PASSED TO IT.				* 00430000
44	*					* 00440000
45	*	SUGGESTED CALLING SYNTAX FOR ALC CALLERS:				* 00450000
46	*					* 00460000
47	*	CALL Y2KGTOA, (DATE)				* 00470000
48	*					* 00480000
49	*	DATE	DS	ZL8'01011997'		* 00490000
50	*	RC	DS	ZL1'0'		* 00500000
51	*	ANUM	DS	ZL7'00000000'		* 00510000
52	*					* 00520000
53	*	SUGGESTED CALLING SYNTAX FOR COBOL CALLERS:				* 00530000
54	*					* 00540000
55	*	01 GTOA-PARAMETERS.				* 00550000
56	*	02 DATE PIC 9(8) VALUE 01011997.				* 00560000

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE STATEMENT	ASM 0201 13.38 12/29/21
				57 *	02 RC PIC 9(1) VALUE 0.	* 00570000
				58 *	02 ANUM PIC 9(7) VALUE 0.	* 00580000
				59 *	CALL 'Y2KGT0A' USING GTOA-PARAMETERS.	* 00590000
				60 *		* 00600000
				61 *	6. THE POSSIBLE VALUES FOR THE RETURN CODE FIELD ARE:	* 00610000
				62 *		* 00620000
				63 *	0 INDICATES SUCCESSFUL EXECUTION OF THE ROUTINE.	* 00630000
				64 *		* 00640000
				65 *	2 INDICATES INVALID DATA WAS FOUND IN THE DATE FIELD.	* 00650000
				66 *	INVALID DATA ARE DETERMINED IF THE FIELD'S LOW ORDER	* 00660000
				67 *	BYTE'S ZONE CONTAINS AN INVALID SIGN, (NOT ONE OF	* 00670000
				68 *	X'C', X'D' OR X'F'), OR IF THE PRECEDING BYTES' ZONES	* 00680000
				69 *	ARE OTHER THAN X'F', OR IF ANY BYTE'S LOW ORDER NIBBLE	* 00690000
				70 *	CONTAINS A VALUE GREATER THAN X'9'.	* 00700000
				71 *		* 00710000
				72 *	4 INDICATES THE VALUE OF THE YEAR SPECIFIED WAS NOT IN	* 00720000
				73 *	THE RANGE SPECIFIED IN 1 (ABOVE).	* 00730000
				74 *		* 00740000
				75 *	6 INDICATES THE VALUE OF THE MONTH SPECIFIED WAS NOT IN	* 00750000
				76 *	THE RANGE SPECIFIED IN 2 (ABOVE).	* 00760000
				77 *		* 00770000
				78 *	8 INDICATES THE VALUE OF THE DAY SPECIFIED WAS NOT IN	* 00780000
				79 *	THE RANGE SPECIFIED IN 3 (ABOVE).	* 00790000
				80 *		* 00800000
				81 *	7. UPON SUCCESSFUL EXECUTION, THE ASTRONOMICAL NUMBER FOR THE	* 00810000
				82 *	DATE WILL BE PLACED IN THE 3RD PARAMETER FIELD (ANUM). IF	* 00820000
				83 *	THE RETURN CODE IS A NON-ZERO VALUE (UNSUCCESSFUL	* 00830000
				84 *	EXECUTION), THE ANUM FIELD WILL CONTAIN ZEROS.	* 00840000
				85 *	-----	* 00850000
				86 *	CHANGE LOG:	* 00860000
				87 *	0.1 04/17/2008 - CHANGED METHOD OF DETERMINING LEAP YEAR AT THE	* 00870000
				88 *	SUGGESTION OF ANGEL LUIS DOMINGUEZ. TESTS ARE	* 00880000
				89 *	NOW DONE ON BINARY FORM OF YEAR, ELIMINATING THE	* 00890000
				90 *	USE OF PACKED DECIMAL INSTRUCTIONS. TESTS ON MY	* 00900000
				91 *	EMULATED HARDWARE SHOW A SAVINGS OF 3.13 SECONDS	* 00910000
				92 *	ON 500,000 ITERATIONS.	* 00920000
				93 *	*****	* 00930000
				94 *	*****	* 00940000

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE	STATEMENT	ASM 0201 13.38 12/29/21
000000				96	Y2KGT0A	CSECT	00960000
				97		PRINT GEN	00970000
				98	EYEC	'RETURN ASTRO NUMBER FOR GREGORIAN DATE'	00980000
000000	47F0 F044	00044		99+	EC\$\$B	B EC\$\$L(,R15) BRANCH AROUND EYECATCHER	00030000
000004	3F			100+		DC AL1(EC\$\$E-EC\$\$V) LENGTH OF VERSION INFO	00040000
000005	E8F2D2C7E3D6C140			101+	EC\$\$V	DC C'Y2KGT0A ' CSECT NAME	00050000
00000D	F1F261F2F961F2F1			102+		DC C'12/29/21 13.38 - ' WHEN ASSEMBLED	00060000
00001E	D9C5E3E4D9D540C1			103+		DC C'RETURN ASTRO NUMBER FOR GREGORIAN DATE'	00080000
000044				104+	EC\$\$E	DS 0H	00100000
		00044		105+	EC\$\$L	EQU (*-EC\$\$B) LENGTH OF EYECATCHER FIELDS	00110000
				106	*		00990000
				107		SAVE (14,12) SAVE CALLER'S REGISTERS	01000000
000044				108+		DS 0H	01650000
000044	90EC D00C	0000C		109+		STM 14,12,12(13) SAVE REGISTERS	02950000
				110	*		01010000
000048	18CF			111		LR R12,R15 LOAD BASE WITH ENTRY ADDRESS	01020000
		00000		112		USING Y2KGT0A,R12 ESTABLISH ADDRESSABILITY	01030000
				113	*		01040000
00004A	58B0 1000	00000		114		L R11,0(,R1) LOAD A(PARAMETERS)	01050000
		00000		115		USING \$PARMS,R11 ESTABLISH ADDRESSABILITY	01060000
				116	*		01070000
				117		GETMAIN R,LV=\$DYNLEN GETMAIN DYNAMIC WORKAREA	01080000
00004E	0700			118+		CNOP 0,4	
000050	4510 C058	00058		119+		BAL 1,*+8 BRANCH AROUND LENGTH	
000054	000000AE			120+		DC A(\$DYNLEN) LENGTH	
000058	5800 1000	00000		121+		L 0,0(0,1) LOAD LENGTH	
00005C	0A0A			122+		SVC 10 ISSUE GETMAIN SVC	
00005E	18A1			123		LR R10,R1 SAVE A(MEMORY)	01090000
				124	*		01100000
000060	50D0 A004	00004		125		ST R13,4(,R10) STORE A(CALLER'S SAVE AREA)	01110000
000064	50A0 D008	00008		126		ST R10,8(,R13) BACK CHAIN A(MY SAVE AREA)	01120000
000068	18DA			127		LR R13,R10 SET A(MY SAVE AREA)	01130000
		00000		128		USING \$DYNMEM,R13 ESTABLISH ADDRESSABILITY	01140000
				129	*		01150000
				130	*	INSERT EYECATCHER MARKS AT BEGIN/END OF GETMAIN'D AREA.	01160000
				131	*		01170000
00006A	D217 D048 C288	00048	00288	132		MVC TOPFLAG,=C'Y2KGT0A GETMAIN BEGINS->'	01180000
000070	D215 D098 C2AC	00098	002AC	133		MVC BOTFLAG,=C'<-Y2KGT0A GETMAIN ENDS'	01190000
				134	*		01200000
				135	*	INITIALIZE RETURN CODE AND ANUM PARAMETER FIELDS.	01210000
				136	*		01220000
000076	92F0 B008	00008		137		MVI PRC,C'0' ASSUME GOOD RETURN	01230000
00007A	D206 B009 B008	00009	00008	138		MVC PRC+1(7),PRC NULL ASTRONOMICAL NUMBER	01240000
				139	*		01250000
				140	*	TEST DATE FOR INVALID CHARACTER	01260000
				141	*		01270000
000080	4120 B000	00000		142		LA R2,PDATE ADDRESS PASSED DATE	01280000
000084	4130 0007	00007		143		LA R3,7 LENGTH MINUS 1	01290000
000088	95F0 2000	00000		144	P1VLOOP	CLI 0(R2),X'F0' TEST LESS THAN C'0'	01300000
00008C	4740 C0CE	000CE		145		BL P1ERR1 IF YES, DATE CONTAINS BAD DATA	01310000
000090	95F9 2000	00000		146		CLI 0(R2),X'F9' TEST GREATER THAN C'9'	01320000
000094	4720 C0CE	000CE		147		BH P1ERR1 IF YES, DATE CONTAINS BAD DATA	01330000
000098	4120 2001	00001		148		LA R2,1(0,R2) ADDRESS NEXT BYTE	01340000
00009C	4630 C088	00088		149		BCT R3,P1VLOOP CONTINUE TESTING	01350000
0000A0	4330 2000	00000		150		IC R3,0(,R2) LOAD RIGHT-MOST CHARACTER	01360000

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT	SOURCE	STATEMENT	ASM	0201	13.38	12/29/21
0000A4	1843				151	LR	R4,R3				01370000
0000A6	5430	C2A0	002A0		152	N	R3,=F'15'				01380000
0000AA	4930	C2C2	002C2		153	CH	R3,=H'9'				01390000
0000AE	4720	C0CE	000CE		154	BH	P1ERR1				01400000
0000B2	8840	0004	00004		155	SRL	R4,4				01410000
0000B6	4940	C2C4	002C4		156	CH	R4,=H'12'				01420000
0000BA	4780	C0D6	000D6		157	BE	P10K1				01430000
0000BE	4940	C2C6	002C6		158	CH	R4,=H'13'				01440000
0000C2	4780	C0D6	000D6		159	BE	P10K1				01450000
0000C6	4940	C2C8	002C8		160	CH	R4,=H'15'				01460000
0000CA	4780	C0D6	000D6		161	BE	P10K1				01470000
					162	*					01480000
					163	*	DATE CONTAINED AN INVALID CHARACTER				01490000
					164	*					01500000
0000CE	92F2	B008	00008		165	P1ERR1	MVI PRC,C'2'				01510000
0000D2	47F0	C238	00238		166	B	RETURN				01520000
					167	*					01530000
					168	*	TEST YEAR FOR VALID RANGE				01540000
					169	*					01550000
0000D6	F233	D064	B004	00064	00004	170	P10K1	PACK YEAR(4),PDATE+4(4)			01560000
0000DC	F932	D064	C2D0	00064	002D0	171	CP	YEAR(4),=P'1601'			01570000
0000E2	4740	C0F0		000F0		172	BL	P1ERR2			01580000
0000E6	F932	D064	C2D3	00064	002D3	173	CP	YEAR(4),=P'3399'			01590000
0000EC	47D0	C0F8		000F8		174	BNH	P10K2			01600000
					175	*					01610000
					176	*	YEAR CONTAINED AN INVALID VALUE (OUT OF RANGE)				01620000
					177	*					01630000
0000F0	92F4	B008	00008		178	P1ERR2	MVI PRC,C'4'				01640000
0000F4	47F0	C238	00238		179	B	RETURN				01650000
					180	*					01660000
					181	*	TEST MONTH FOR VALID RANGE				01670000
					182	*					01680000
0000F8	F211	D060	B000	00060	00000	183	P10K2	PACK MONTH(2),PDATE(2)			01690000
0000FE	F910	D060	C2D6	00060	002D6	184	CP	MONTH(2),=P'1'			01700000
000104	4740	C112		00112		185	BL	P1ERR3			01710000
000108	F911	D060	C2CA	00060	002CA	186	CP	MONTH(2),=P'12'			01720000
00010E	47D0	C11A		0011A		187	BNH	P10K3			01730000
					188	*					01740000
					189	*	MONTH CONTAINED AN INVALID VALUE (OUT OF RANGE)				01750000
					190	*					01760000
000112	92F6	B008	00008		191	P1ERR3	MVI PRC,C'6'				01770000
000116	47F0	C238	00238		192	B	RETURN				01780000
					193	*					01790000
					194	*	DETERMINE LEAP YEAR STATUS				01800000
					195	*					01810000
00011A	92F0	D08B		0008B		196	P10K3	MVI LEAP,C'0'			01820000
00011E	F122	D068	D065	00068	00065	197	MVO	B3(3),YEAR+1(3)			01830000
000124	9101	D069		00069		198	TM	B3+1,X'01'		0.1	01840000
000128	4710	C150		00150		199	BO	P1CON4		0.1	01850000
00012C	9112	D069		00069		200	TM	B3+1,X'12'		0.1	01860000
000130	4740	C150		00150		201	BM	P1CON4		0.1	01870000
000134	9500	D069		00069		202	CLI	B3+1,X'00'		0.1	01880000
000138	4770	C14C		0014C		203	BNE	ISLEAP		0.1	01890000
00013C	9101	D068		00068		204	TM	B3,X'01'		0.1	01900000
000140	4710	C150		00150		205	BO	P1CON4		0.1	01910000

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT	SOURCE	STATEMENT	ASM	0201	13.38	12/29/21
000144	9112	D068	00068		206	TM	B3,X'12'	EVENLY DIVISIBLE BY 400?	0.1	01920000	
000148	4740	C150	00150		207	BM	P1CON4	IF NO, IT IS *NOT* LEAP YEAR	0.1	01930000	
					208	*		ELSE IT IS A LEAP YEAR	0.1	01940000	
					209	*				01950000	
					210	*	TEST FOR LEAP YEAR SUCCEEDED, RESET LEAP INDICATOR.			01960000	
					211	*				01970000	
00014C	92F1	D08B	0008B		212	ISLEAP	MVI LEAP,C'1'	INDICATE LEAP YEAR		01980000	
					213	*				01990000	
					214	*	DETERMINE MAXIMUM DAYS FOR GIVEN MONTH			02000000	
					215	*				02010000	
000150	4140	C252	00252		216	P1CON4	LA R4,DIM	GET ADDRESS OF DAY TABLE		02020000	
000154	95F0	D08B	0008B		217		CLI LEAP,C'0'	IS THIS LEAP YEAR?		02030000	
000158	4780	C160	00160		218		BE P1CON4A	IF NOT, ADDRESS IS OK		02040000	
00015C	4140	4002	00002		219		LA R4,2(,R4)	ELSE ADJUST TO LEAP ENTRY		02050000	
000160	F871	D090	D060 00090	00060	220	P1CON4A	ZAP DWORK(8),MONTH	GET MONTH INTO DOUBLEWORD		02060000	
000166	4F30	D090	00090		221		CVB R3,DWORK	CONVERT TO BINARY		02070000	
00016A	0630				222		BCTR R3,0	DECREMENT BY 1 (ZERO BASE)		02080000	
00016C	8930	0002	00002		223		SLL R3,2	MULTIPLY BY TABLE ENTRY LENGTH		02090000	
000170	4143	4000	00000		224		LA R4,0(R3,R4)	LOAD ENTRY ADDRESS INTO R4		02100000	
					225	*				02110000	
					226	*	TEST DAY FOR VALID RANGE			02120000	
					227	*				02130000	
000174	F211	D062	B002 00062	00002	228		PACK DAY(2),PDATE+2(2)	PACK PASSED DAY		02140000	
00017A	F811	D062	D062 00062	00062	229		ZAP DAY,DAY	CONVERT SIGN OF DAY TO X'C'		02150000	
000180	F910	D062	C2D6 00062	002D6	230		CP DAY(2),=P'1'	IS DAY ZERO?		02160000	
000186	4740	C194	00194		231		BL P1ERR4	IF YES, DAY NOT VALID		02170000	
00018A	D501	D062	4000 00062	00000	232		CLC DAY(2),0(R4)	IS DAY GREATER THAN MAX?		02180000	
000190	47D0	C19C	0019C		233		BNH P10K4	IF NOT, MONTH IS VALID		02190000	
					234	*				02200000	
					235	*	DAY CONTAINED AN INVALID VALUE (OUT OF RANGE)			02210000	
					236	*				02220000	
000194	92F8	B008	00008		237	P1ERR4	MVI PRC,C'8'	INDICATE BAD VALUE		02230000	
000198	47F0	C238	00238		238		B RETURN	AND RETURN TO CALLER		02240000	
					239	*				02250000	
					240	*	COMPUTE ASTRONOMICAL NUMBER			02260000	
					241	*				02270000	
00019C	F910	D060	C2D7 00060	002D7	242	P10K4	CP MONTH(2),=P'2'	IS MONTH GREATER THAN 2?		02280000	
0001A2	4720	C1B6	001B6		243		BH COMP001	YES		02290000	
					244	*				02300000	
0001A6	FA10	D060	C2D8 00060	002D8	245		AP MONTH(2),=P'9'	INCREMENT MONTH BY 9		02310000	
0001AC	FB30	D064	C2D6 00064	002D6	246		SP YEAR(4),=P'1'	DECREMENT YEAR BY 1		02320000	
0001B2	47F0	C1BC	001BC		247		B COMP002	PROCEED WITH CONVERSION		02330000	
					248	*				02340000	
0001B6	FB10	D060	C2D9 00060	002D9	249	COMP001	SP MONTH(2),=P'3'	DECREMENT MONTH BY 3		02350000	
					250	*				02360000	
0001BC	FD31	D064	C2CC 00064	002CC	251	COMP002	DP YEAR,=P'100'	DIVIDE BY 100		02370000	
0001C2	F871	D06B	D064 0006B	00064	252		ZAP TA,YEAR(2)	SAVE QUOTIENT IN TA		02380000	
0001C8	F871	D073	D066 00073	00066	253		ZAP TB,YEAR+2(2)	SAVE REMAINDER IN TB		02390000	
0001CE	FC73	D06B	C2A4 0006B	002A4	254		MP TA,=P'146097'	MULTIPLY BY 146097		02400000	
0001D4	FD70	D06B	C2DA 0006B	002DA	255		DP TA,=P'4'	DIVIDE BY 4		02410000	
0001DA	F876	D06B	D06B 0006B	0006B	256		ZAP TA,TA(7)	SHIFT QUOTIENT OVER REMAINDER		02420000	
					257	*				02430000	
0001E0	FC72	D073	C2DB 00073	002DB	258		MP TB,=P'1461'	MULTIPLY BY 1461		02440000	
0001E6	FD70	D073	C2DA 00073	002DA	259		DP TB,=P'4'	DIVIDE BY 4		02450000	
0001EC	F876	D073	D073 00073	00073	260		ZAP TB,TB(7)	SHIFT QUOTIENT OVER REMAINDER		02460000	

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT	SOURCE	STATEMENT	ASM 0201 13.38 12/29/21
					261	*		02470000
0001F2	F871	D07B	D060	0007B	00060	262	ZAP TC, MONTH	02480000
0001F8	FC71	D07B	C2CE	0007B	002CE	263	MP TC, =P'153'	02490000
0001FE	FA70	D07B	C2D7	0007B	002D7	264	AP TC, =P'2'	02500000
000204	FD70	D07B	C2DE	0007B	002DE	265	DP TC, =P'5'	02510000
00020A	F876	D07B	D07B	0007B	0007B	266	ZAP TC, TC(7)	02520000
000210	FA71	D07B	D062	0007B	00062	267	AP TC, DAY	02530000
000216	FA73	D07B	C2A8	0007B	002A8	268	AP TC, =P'1721119'	02540000
					269	*		02550000
00021C	F877	D083	D06B	00083	0006B	270	ZAP TX, TA	02560000
000222	FA77	D083	D073	00083	00073	271	AP TX, TB	02570000
000228	FA77	D083	D07B	00083	0007B	272	AP TX, TC	02580000
					273	*		02590000
00022E	F363	B009	D087	00009	00087	274	UNPK PANUM(7), TX+4(4)	02600000
000234	96F0	B00F		0000F		275	OI PANUM+6, X'F0'	02610000
					276	*		02620000
					277	*	RESTORE REGISTERS, FREE STORAGE, AND RETURN	02630000
					278	*		02640000
000238	181D				279	RETURN LR R1, R13	LOAD ADDRESS OF GETMAINED AREA	02650000
00023A	58D0	D004		00004	280	L R13, 4(, R13)	RELOAD PREVIOUS SAVE AREA	02660000
00023E	4100	00AE		000AE	281	LA R0, \$DYNLEN	LOAD LENGTH OF GETMAINED AREA	02670000
					282	FREEMAIN R, LV=(0), A=(1)	FREE GETMAINED AREA	02680000
					283+	*	OS/VS2 RELEASE 3 VERSION -- 10/25/74	00001603
000242	4110	1000		00000	284+	LA 1, 0(0, 1)	CLEAR HI ORDER BYTE	00150802
000246	0A0A				285+	SVC 10	ISSUE FREEMAIN SVC	00311202
					286	RETURN (14, 12), RC=0	RETURN TO CALLER WITH RC=0	02690000
000248	98EC	D00C		0000C	287+	LM 14, 12, 12(13)	RESTORE THE REGISTERS	00650000
00024C	41F0	0000		00000	288+	LA 15, 0(0, 0)	LOAD RETURN CODE	01750000
000250	07FE				289+	BR 14	RETURN	02000000

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE STATEMENT	ASM 0201 13.38 12/29/21
				291	* *****	* 02710000
				292	* ***** CONSTANTS *****	* 02720000
				293	* *****	* 02730000
				294	*	02740000
				295	* MAXIMUM DAYS IN MONTHS ... EACH ENTRY HAS 2 VALUES, THE 1ST FOR	02750000
				296	* A NORMAL (NON-LEAP) YEAR AND THE 2ND FOR A LEAP YEAR	02760000
				297	*	02770000
000252	031C031C			298	DIM DC PL2'31',PL2'31' JANUARY	02780000
000256	028C029C			299	DC PL2'28',PL2'29' FEBRUARY	02790000
00025A	031C031C			300	DC PL2'31',PL2'31' MARCH	02800000
00025E	030C030C			301	DC PL2'30',PL2'30' APRIL	02810000
000262	031C031C			302	DC PL2'31',PL2'31' MAY	02820000
000266	030C030C			303	DC PL2'30',PL2'30' JUNE	02830000
00026A	031C031C			304	DC PL2'31',PL2'31' JULY	02840000
00026E	031C031C			305	DC PL2'31',PL2'31' AUGUST	02850000
000272	030C030C			306	DC PL2'30',PL2'30' SEPTEMBER	02860000
000276	031C031C			307	DC PL2'31',PL2'31' OCTOBER	02870000
00027A	030C030C			308	DC PL2'30',PL2'30' NOVEMBER	02880000
00027E	031C031C			309	DC PL2'31',PL2'31' DECEMBER	02890000
				310	* *****	* 02900000
000288				311	LTORG	02910000
000288	E8F2D2C7E3D6C140			312	=C'Y2KGT0A GETMAIN BEGINS->'	
0002A0	0000000F			313	=F'15'	
0002A4	0146097C			314	=P'146097'	
0002A8	1721119C			315	=P'1721119'	
0002AC	4C60E8F2D2C7E3D6			316	=C'<-Y2KGT0A GETMAIN ENDS'	
0002C2	0009			317	=H'9'	
0002C4	000C			318	=H'12'	
0002C6	000D			319	=H'13'	
0002C8	000F			320	=H'15'	
0002CA	012C			321	=P'12'	
0002CC	100C			322	=P'100'	
0002CE	153C			323	=P'153'	
0002D0	01601C			324	=P'1601'	
0002D3	03399C			325	=P'3399'	
0002D6	1C			326	=P'1'	
0002D7	2C			327	=P'2'	
0002D8	9C			328	=P'9'	
0002D9	3C			329	=P'3'	
0002DA	4C			330	=P'4'	
0002DB	01461C			331	=P'1461'	
0002DE	5C			332	=P'5'	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE STATEMENT	ASM 0201 13.38 12/29/21
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				334	* *****	* 02930000
				335	* ***** EQUATES *****	* 02940000
				336	* *****	* 02950000
				337	YREGS	02960000

00000	339+R0	EQU	0
00001	340+R1	EQU	1
00002	341+R2	EQU	2
00003	342+R3	EQU	3
00004	343+R4	EQU	4
00005	344+R5	EQU	5
00006	345+R6	EQU	6
00007	346+R7	EQU	7
00008	347+R8	EQU	8
00009	348+R9	EQU	9
0000A	349+R10	EQU	10
0000B	350+R11	EQU	11
0000C	351+R12	EQU	12
0000D	352+R13	EQU	13
0000E	353+R14	EQU	14
0000F	354+R15	EQU	15

				356	* *****	* 02970000
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LOC	OBJECT CODE	ADDR1	ADDR2	STMT	SOURCE STATEMENT	ASM 0201 13.38 12/29/21
				358	* *****	* 02990000
				359	* ***** DSECTS *****	* 03000000
				360	* *****	* 03010000
000000				361	\$DYNMEM DSECT DYNAMICALLY ALLOCATED MEMORY	03020000
000000				362	SAVEAREA DS 18F REGISTER SAVE AREA	03030000
000048				363	TOPFLAG DS CL24 EYECATCHER	03040000
000060				364	MONTH DS PL2 GREGORIAN MONTH	03050000
000062				365	DAY DS PL2 GREGORIAN DAY	03060000
000064				366	YEAR DS PL4 GREGORIAN YEAR	03070000
000068				367	B3 DS XL3 WORK AREA FOR BINARY YEAR 0.1	03080000
00006B				368	TA DS PL8 INTERMEDIATE ANSWER	03090000
000073				369	TB DS PL8 INTERMEDIATE ANSWER	03100000
00007B				370	TC DS PL8 INTERMEDIATE ANSWER	03110000
000083				371	TX DS PL8 INTERMEDIATE ANSWER	03120000
00008B				372	LEAP DS CL1 LEAP STATUS	03130000
000090				373	DWORK DS D DOUBLEWORD WORK FIELD	03140000
000098				374	BOTFLAG DS CL22 EYECATCHER	03150000
				375	*	03160000
		000AE		376	\$DYNLEN EQU (*-\$DYNMEM) LENGTH OF GETMAIN'D AREA	03170000
				377	*	03180000
000000				378	\$PARMS DSECT PARAMETERS FROM/TO CALLER	03190000
000000				379	PDATE DS CL8 DATE TO BE PROCESSED	03200000
000008				380	PRC DS CL1 RETURN CODE (0/2/4/6/8)	03210000
000009				381	PANUM DS ZL7 ASTRONOMICAL NUMBER	03220000
				382	* *****	* 03230000
				383	END	03240000

SYMBOL	LEN	VALUE	DEFN	REFERENCES	ASM 0201 13.38 12/29/21
\$DYNLEN	00001	0000000AE	00376	00120 00281	
\$DYNMEM	00001	000000000	00361	00128 00376	
\$PARMS	00001	000000000	00378	00115	
BOTFLAG	00022	000000098	00374	00133	
B3	00003	000000068	00367	00197 00198 00200 00202 00204 00206	
COMP001	00006	000001B6	00249	00243	
COMP002	00006	000001BC	00251	00247	
DAY	00002	000000062	00365	00228 00229 00229 00230 00232 00267	
DIM	00002	00000252	00298	00216	
DWORK	00008	000000090	00373	00220 00221	
EC\$\$B	00004	000000000	00099	00105	
EC\$\$E	00002	000000044	00104	00100	
EC\$\$L	00001	000000044	00105	00099	
EC\$\$V	00008	000000005	00101	00100	
ISLEAP	00004	0000014C	00212	00203	
LEAP	00001	00000008B	00372	00196 00212 00217	
MONTH	00002	000000060	00364	00183 00184 00186 00220 00242 00245 00249 00262	
PANUM	00007	000000009	00381	00274 00275	
PDATE	00008	000000000	00379	00142 00170 00183 00228	
PRC	00001	000000008	00380	00137 00138 00138 00165 00178 00191 00237	
P1CON4	00004	00000150	00216	00199 00201 00205 00207	
P1CON4A	00006	00000160	00220	00218	
P1ERR1	00004	0000000CE	00165	00145 00147 00154	
P1ERR2	00004	0000000F0	00178	00172	
P1ERR3	00004	00000112	00191	00185	
P1ERR4	00004	00000194	00237	00231	
P10K1	00006	0000000D6	00170	00157 00159 00161	
P10K2	00006	0000000F8	00183	00174	
P10K3	00004	0000011A	00196	00187	
P10K4	00006	0000019C	00242	00233	
P1VLOOP	00004	000000088	00144	00149	
RETURN	00002	00000238	00279	00166 00179 00192 00238	
R0	00001	000000000	00339	00281	
R1	00001	000000001	00340	00114 00123 00279	
R10	00001	00000000A	00349	00123 00125 00126 00127	
R11	00001	00000000B	00350	00114 00115	
R12	00001	00000000C	00351	00111 00112	
R13	00001	00000000D	00352	00125 00126 00127 00128 00279 00280 00280	
R15	00001	00000000F	00354	00099 00111	
R2	00001	000000002	00341	00142 00144 00146 00148 00148 00150	
R3	00001	000000003	00342	00143 00149 00150 00151 00152 00153 00221 00222 00223 00224	
R4	00001	000000004	00343	00151 00155 00156 00158 00160 00216 00219 00219 00224 00224 00232	
TA	00008	00000006B	00368	00252 00254 00255 00256 00256 00270	
TB	00008	000000073	00369	00253 00258 00259 00260 00260 00271	
TC	00008	00000007B	00370	00262 00263 00264 00265 00266 00266 00267 00268 00272	
TOPFLAG	00024	000000048	00363	00132	
TX	00008	000000083	00371	00270 00271 00272 00274	
YEAR	00004	000000064	00366	00170 00171 00173 00197 00246 00251 00252 00253	
Y2KGTOA	00001	000000000	00096	00112	

SYMBOL LEN VALUE DEFN REFERENCES ASM 0201 13.38 12/29/21

=C'Y2KGTOA GETMAIN BEGINS->'

00024 00000288 00312 00132

=F'15' 00004 000002A0 00313 00152

=P'146097' 00004 000002A4 00314 00254

=P'1721119' 00004 000002A8 00315 00268

=C'<-Y2KGTOA GETMAIN ENDS'

00022 000002AC 00316 00133

=H'9' 00002 000002C2 00317 00153

=H'12' 00002 000002C4 00318 00156

=H'13' 00002 000002C6 00319 00158

=H'15' 00002 000002C8 00320 00160

=P'12' 00002 000002CA 00321 00186

=P'100' 00002 000002CC 00322 00251

=P'153' 00002 000002CE 00323 00263

=P'1601' 00003 000002D0 00324 00171

=P'3399' 00003 000002D3 00325 00173

=P'1' 00001 000002D6 00326 00184 00230 00246

=P'2' 00001 000002D7 00327 00242 00264

=P'9' 00001 000002D8 00328 00245

=P'3' 00001 000002D9 00329 00249

=P'4' 00001 000002DA 00330 00255 00259

=P'1461' 00003 000002DB 00331 00258

=P'5' 00001 000002DE 00332 00265

ASM 0201 13.38 12/29/21

NO STATEMENTS FLAGGED IN THIS ASSEMBLY

HIGHEST SEVERITY WAS 0

OPTIONS FOR THIS ASSEMBLY

ALIGN, ALOGIC, BUFSIZE(STD), NODECK, ESD, FLAG(0), LINECOUNT(55), LIST, NOMCALL, YFLAG, WORKSIZE(2097152)
NOMLOGIC, NONUMBER, OBJECT, NORENT, RLD, NOSTMT, NOLIBMAC, NOTERMINAL, NOTEST, XREF(SHORT)
SYSPARM()

WORK FILE BUFFER SIZE/NUMBER = 2558/ 1

TOTAL RECORDS READ FROM SYSTEM INPUT	324
TOTAL RECORDS READ FROM SYSTEM LIBRARY	1658
TOTAL RECORDS PUNCHED	16
TOTAL RECORDS PRINTED	490

IEW0000	NAME VSUPDT(R)	00002600
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CROSS REFERENCE TABLE

CONTROL SECTION			ENTRY							
NAME	ORIGIN	LENGTH	NAME	LOCATION	NAME	LOCATION	NAME	LOCATION	NAME	LOCATION
VSUPDT	00	2BC6								
SORTNAME	2BC8	5B2								
Y2KGTOA	3180	2DF								
ILBODSP0*	3460	700								
ILBOSPA0*	3B60	2D8								
ILBOSTP0*	3E38	35								
			ILBOSTP1	3E4E						
ILBOWTB0*	3E70	100								
VSAMIO *	3F70	D0A								

LOCATION	REFERS TO SYMBOL	IN CONTROL SECTION	LOCATION	REFERS TO SYMBOL	IN CONTROL SECTION
CD0	ILBOSTP0	ILBOSTP0	CD4	ILBOSPA0	ILBOSPA0
CD8	VSAMIO	VSAMIO	CDC	ILBODSP0	ILBODSP0
CE0	ILBOSTP1	ILBOSTP0	CE4	ILBOWTB0	ILBOWTB0
CE8	Y2KGT0A	Y2KGT0A	CEC	SORTNAME	SORTNAME
2E78	ILBOSTP0	ILBOSTP0	2E7C	ILBOSTP1	ILBOSTP0

ENTRY ADDRESS	00
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TOTAL LENGTH 4C80

```
****VSUPDT      NOW REPLACED IN DATA SET
```

AUTHORIZATION CODE IS 0.

COBUCL7	(J 958) -	COBUC	.COB	ENDED,	CODE 0004,	21.363	13:38:57
COBUCL7	(J 958) -	COBUC	.COB	ENDED,	CODE 0000,	21.363	13:38:57
COBUCL7	(J 958) -	ASMXCL	.ASM	ENDED,	CODE 0000,	21.363	13:38:57
COBUCL7	(J 958) -	ASMXCL	.LKED	ENDED,	CODE 0000,	21.363	13:38:57