J E S 2 J O B L O G

```
17.18.20 JOB  125  IEF677I WARNING MESSAGE(S) FOR JOB VSTESTK5 ISSUED
17.18.20 JOB  125  $HASP373 VSTESTK5 STARTED - INIT  1 - CLASS A - SYS HMVS
17.18.20 JOB  125  IEF403I VSTESTK5 - STARTED - TIME=17.18.20
17.18.20 JOB  125  IEC130I SYSPUNCH DD STATEMENT MISSING
17.18.20 JOB  125  IEC130I SYSPUNCH DD STATEMENT MISSING
17.18.20 JOB  125  CCI001C COB     /IKFCBL00/00:00:00.07/        /00000/1       /VSTESTK5
17.18.20 JOB  125  CCI001C LKED    /IEWL    /00:00:00.02/        /00000/1       /VSTESTK5
17.18.20 JOB  125  CCI001C GO      /PGM=*.DD/00:00:00.01/        /00000/1       /VSTESTK5
17.18.20 JOB  125  IEF404I VSTESTK5 - ENDED - TIME=17.18.20
17.18.20 JOB  125  $HASP395 VSTESTK5 ENDED


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


 07 JUL 20 JOB EXECUTION DATE


        28 CARDS READ


       697 SYSOUT PRINT RECORDS


         0 SYSOUT PUNCH RECORDS


      0.00 MINUTES EXECUTION TIME
```

```
 1     //VSTESTK5 JOB 1,'VSAMIO IVP KSDSRAND ',CLASS=A,MSGCLASS=X,             JOB  125
       //             REGION=4096K
       ***
       ********************************************************************
       *** COBOL MODULE: KSDSRAND     VSAM DATASET: VSTESTKS.CLUSTER (KSDS)
       ***
       *** RANDOMLY ACCESS DATASET AND ADD, UPDATE, DELETE RECORDS
       ********************************************************************
       ***
 2     //COB     EXEC COBUCLG,REGION.GO=1024K,CPARM1='LOAD,LIB,DMAP'
 3     XXCOBUCLG PROC CPARM1='LOAD,SUPMAP',                               100010000
       XX             CPARM2='SIZE=2048K,BUF=1024K'                        00020000
 4     XXCOB  EXEC  PGM=IKFCBL00,REGION=4096K,                             00040001
       XX           PARM='&CPARM1,&CPARM2'                                 00050001
 5     XXSTEPLIB  DD DSN=SYSC.LINKLIB,DISP=SHR                             00051001
 6     XXSYSPRINT  DD SYSOUT=*                                             00060000
 7     XXSYSUT1 DD UNIT=SYSDA,SPACE=(460,(700,100))                        00070000
 8     XXSYSUT2 DD UNIT=SYSDA,SPACE=(460,(700,100))                        00080000
 9     XXSYSUT3 DD UNIT=SYSDA,SPACE=(460,(700,100))                        00090000
10     XXSYSUT4 DD UNIT=SYSDA,SPACE=(460,(700,100))                        00100000
11     XXSYSLIN DD DSN=&LOADSET,DISP=(MOD,PASS),UNIT=SYSDA,                00110000
       XX             SPACE=(80,(500,100))                                 00120000
12     //COB.SYSLIB DD DSN=SYSC.VSAMIO.SOURCE,DISP=SHR
13     //COB.SYSIN DD DSN=SYSC.VSAMIO.SOURCE(KSDSRAND),DISP=SHR
14     XXLKED EXEC PGM=IEWL,PARM='LIST,XREF,LET',COND=(5,LT,COB),REGION=96K 00130000
15     XXSYSLIN  DD DSN=&LOADSET,DISP=(OLD,DELETE)                         00140000
16     XX  DD  DDNAME=SYSIN                                                00150000
17     XXSYSLMOD DD DSN=&GODATA(RUN),DISP=(NEW,PASS),UNIT=SYSDA,           00160000
       XX             SPACE=(1024,(50,20,1))                               00170000
18     //LKED.SYSLIB DD
       X/SYSLIB DD   DSN=SYSC.COBLIB,DISP=SHR                              00180000
19     //         DD  DSN=SYSC.LINKLIB,DISP=SHR
20     XXSYSUT1 DD UNIT=SYSDA,SPACE=(1024,(50,20))                         00190000
21     XXSYSPRINT DD SYSOUT=*                                              00200000
22     XXGO  EXEC PGM=*.LKED.SYSLMOD,COND=((5,LT,COB),(5,LT,LKED))         00210000
23     //GO.SYSOUT DD SYSOUT=*
24     //GO.SYSUDUMP DD SYSOUT=*
25     //GO.KSDSF01 DD DSN=PUB001.VSTESTKS.CLUSTER,DISP=OLD
26     //GO.SYSIN DD  *
```

```
                 VV         VV   SSSSSSSSSS   TTTTTTTTTTTT  EEEEEEEEEEEE   SSSSSSSSSS   TTTTTTTTTTTT  KK         KK  555555555555
                VV         VV  SSSSSSSSSSSS  TTTTTTTTTTTT  EEEEEEEEEEEE  SSSSSSSSSSSS  TTTTTTTTTTTT  KK        KK   555555555555
               VV         VV  SS         SS       TT       EE            SS         SS       TT       KK       KK     55
              VV         VV  SS                  TT       EE            SS                  TT       KK      KK      55
             VV         VV  SSS                 TT       EE            SSS                 TT       KK     KK       55
            VV         VV   SSSSSSSSS          TT       EEEEEEEE       SSSSSSSSS          TT       KKKKKKK        555555555
           VV         VV    SSSSSSSSS         TT       EEEEEEEE       SSSSSSSSS          TT       KKKKKKK        5555555555
           VV       VV            SSS        TT       EE                   SSS       TT        KK     KK               55
           VV     VV              SS        TT       EE                    SS       TT        KK      KK               55
           VV   VV      SS         SS       TT       EE            SS         SS       TT        KK       KK              55
           VVVV       SSSSSSSSSSSS        TT       EEEEEEEEEEEE  SSSSSSSSSSSS       TT        KK       KK   555555555555
           VV         SSSSSSSSSS         TT       EEEEEEEEEEEE   SSSSSSSSSS        TT        KK         KK  55555555555


                      JJJJJJJJJJ       11        2222222222   555555555555                              MM         MM
                      JJJJJJJJJJ      111       222222222222  555555555555                              MMM       MMM
                          JJ         1111       22        22  55                                        MMMM     MMMM
                          JJ           11                 22  55                                        MM MM  MM MM
                          JJ           11                 22  55                                        MM  MMMM  MM
                          JJ           11                22   555555555                                 MM   MM   MM
                          JJ           11              22     5555555555                                MM         MM
                          JJ           11            22                55                               MM         MM
                    JJ    JJ           11          22                   55                              MM         MM
                    JJ    JJ           11        22                     55                              MM         MM
                    JJJJJJJJ       1111111111   222222222222  555555555555                              MM         MM
                     JJJJJJ        1111111111   222222222222  55555555555                               MM         MM


****M   END   JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125   END   M****
****M   END   JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125   END   M****
****M   END   JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125   END   M****
****M   END   JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125   END   M****
```

```
****M  START  JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125  START  M****
****M  START  JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125  START  M****
****M  START  JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125  START  M****
****M  START  JOB  125  VSTESTK5  VSAMIO IVP KSDSRAND   ROOM        5.19.55 PM 07 JUL 20  PRINTER2  SYS HMVS  JOB  125  START  M****
```

```
 STMT NO. MESSAGE
-
    4     IEF653I SUBSTITUTION JCL - PARM='LOAD,LIB,DMAP,SIZE=2048K,BUF=1024K'
   22     IEF686I DDNAME REFERRED TO ON DDNAME KEYWORD IN PRIOR STEP WAS NOT RESOLVED
IEF236I ALLOC. FOR VSTESTK5 COB COB
IEF237I 253  ALLOCATED TO STEPLIB
IEF237I 253  ALLOCATED TO SYS00209
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I 380  ALLOCATED TO SYSUT1
IEF237I 251  ALLOCATED TO SYSUT2
IEF237I 370  ALLOCATED TO SYSUT3
IEF237I 252  ALLOCATED TO SYSUT4
IEF237I 252  ALLOCATED TO SYSLIN
IEF237I 253  ALLOCATED TO SYSLIB
IEF237I 253  ALLOCATED TO SYSIN
IEC130I SYSPUNCH DD STATEMENT MISSING
IEC130I SYSPUNCH DD STATEMENT MISSING
IEF142I VSTESTK5 COB COB - 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.JOB00125.SO0102                         SYSOUT
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000001     DELETED       *--------6
IEF285I   VOL SER NOS= MVS380.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000002     DELETED       *--------6
IEF285I   VOL SER NOS= WORK00.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000003     DELETED       *--------9
IEF285I   VOL SER NOS= MVS370.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000004     DELETED       *--------8
IEF285I   VOL SER NOS= WORK01.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.LOADSET      PASSED        *-------99
IEF285I   VOL SER NOS= WORK01.
IEF285I   SYSC.VSAMIO.SOURCE                           KEPT          *--------6
IEF285I   VOL SER NOS= SYSCPK.
IEF285I   SYSC.VSAMIO.SOURCE                           KEPT          *--------4
IEF285I   VOL SER NOS= SYSCPK.
IEF373I STEP /COB     / START 20189.1718
IEF374I STEP /COB     / STOP  20189.1718 CPU    0MIN 00.07SEC SRB    0MIN 00.02SEC VIRT  2076K SYS   216K
**** JOBCARD READ 20189 17:18:20 *****************************************************************************
*                                           PRC-CCI  370/148 VS2 R03.8  HMVS  STEP STATISTICS                *
*  STEP NAME  COB         USER CORE         2076K   TAPES USED/IO 000/000000000   START   TIME  17:18:20    TCB TIME  00:00:00.07  *
*  PGM  NAME  IKFCBL00    SYSTEM CORE        216K   DISKS USED/IO 005/000000138   STOP    TIME  17:18:20    SRB TIME  00:00:00.02  *
*   COND CODE    0000     PRIVATE AREA SZ   4096K       ALLOC TIME  17:18:20      ELAPSED TIME                PGM LOAD  17:18:20   *
** PGNO * NR SRV UNITS * ACTIVE TIME ** PAGES IN *** PAGES OUT ** # SWAPS * PGS SWAP IN * PGS SWAP OUT * VIO PGS IN * VIO PGS OUT **
*   004           816   00:00:00.11           0             0        0             0             0             0             0  *
*************************************************************************************************************
*  CPU $ (     0.02) + EXCP $ (     0.18) + MEMORY $ (     0.41) = TOTAL $ (     0.61)                       *
*************************************************************************************************************
IEF236I ALLOC. FOR VSTESTK5 LKED COB
IEF237I 252  ALLOCATED TO SYSLIN
IEF237I DMY  ALLOCATED TO
IEF237I 380  ALLOCATED TO SYSLMOD
IEF237I 253  ALLOCATED TO SYSLIB
IEF237I 253  ALLOCATED TO
IEF237I 253  ALLOCATED TO SYS00211
IEF237I 370  ALLOCATED TO SYSUT1
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF142I VSTESTK5 LKED COB - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS20189.T171820.RA000.VSTESTK5.LOADSET      DELETED       *------100
IEF285I   VOL SER NOS= WORK01.
```

```
IEF285I   SYS20189.T171820.RA000.VSTESTK5.GODATA       PASSED         *-------12
IEF285I   VOL SER NOS= MVS380.
IEF285I   SYSC.COBLIB                                  KEPT           *-------27
IEF285I   VOL SER NOS= SYSCPK.
IEF285I   SYSC.LINKLIB                                 KEPT           *--------0
IEF285I   VOL SER NOS= SYSCPK.
IEF285I   UCSYSCPK                                     KEPT           *--------0
IEF285I   VOL SER NOS= SYSCPK.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000005     DELETED        *--------0
IEF285I   VOL SER NOS= MVS370.
IEF285I   JES2.JOB00125.SO0103                         SYSOUT
IEF373I STEP /LKED    / START 20189.1718
IEF374I STEP /LKED    / STOP  20189.1718 CPU    0MIN 00.02SEC SRB    0MIN 00.00SEC VIRT   260K SYS   208K
********************************************************************************************************************
*                                       PRC-CCI  370/148 VS2 R03.8  HMVS  STEP STATISTICS                              *
*  STEP NAME  LKED        USER CORE          260K   TAPES USED/IO 000/000000000   START   TIME  17:18:20    TCB TIME  00:00:00.02  *
*  PGM  NAME  IEWL        SYSTEM CORE        208K   DISKS USED/IO 004/000000139   STOP    TIME  17:18:20    SRB TIME  00:00:00.00  *
*   COND CODE    0000     PRIVATE AREA SZ   4096K       ALLOC TIME  17:18:20      ELAPSED TIME                PGM LOAD  17:18:20   *
** PGNO * NR SRV UNITS * ACTIVE TIME ** PAGES IN *** PAGES OUT ** # SWAPS * PGS SWAP IN * PGS SWAP OUT * VIO PGS IN * VIO PGS OUT **
*   004            724   00:00:00.03            0             0        0             0             0             0            0  *
********************************************************************************************************************
*  CPU $ (     0.00) + EXCP $ (     0.18) + MEMORY $ (     0.01) = TOTAL $ (     0.19)                                 *
********************************************************************************************************************
IEF236I ALLOC. FOR VSTESTK5 GO COB
IEF237I 380  ALLOCATED TO PGM=*.DD
IEF237I JES2 ALLOCATED TO SYSOUT
IEF237I JES2 ALLOCATED TO SYSUDUMP
IEF237I 190  ALLOCATED TO KSDSF01
IEF237I 190  ALLOCATED TO SYS00213
IEF237I JES2 ALLOCATED TO SYSIN
IEF142I VSTESTK5 GO COB - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS20189.T171820.RA000.VSTESTK5.GODATA       KEPT           *--------0
IEF285I   VOL SER NOS= MVS380.
IEF285I   JES2.JOB00125.SO0104                         SYSOUT
IEF285I   JES2.JOB00125.SO0105                         SYSOUT
IEF285I   PUB001.VSTESTKS.CLUSTER                      KEPT           *-------12
IEF285I   VOL SER NOS= PUB001.
IEF285I   UCPUB001                                     KEPT           *--------0
IEF285I   VOL SER NOS= PUB001.
IEF285I   JES2.JOB00125.SI0101                         SYSIN
IEF373I STEP /GO      / START 20189.1718
IEF374I STEP /GO      / STOP  20189.1718 CPU    0MIN 00.01SEC SRB    0MIN 00.00SEC VIRT    72K SYS   220K
********************************************************************************************************************
*                                       PRC-CCI  370/148 VS2 R03.8  HMVS  STEP STATISTICS                              *
*  STEP NAME  GO          USER CORE           72K   TAPES USED/IO 000/000000000   START   TIME  17:18:20    TCB TIME  00:00:00.01  *
*  PGM  NAME  PGM=*.DD    SYSTEM CORE        220K   DISKS USED/IO 002/000000012   STOP    TIME  17:18:20    SRB TIME  00:00:00.00  *
*   COND CODE    0000     PRIVATE AREA SZ   4096K       ALLOC TIME  17:18:20      ELAPSED TIME                PGM LOAD  17:18:20   *
** PGNO * NR SRV UNITS * ACTIVE TIME ** PAGES IN *** PAGES OUT ** # SWAPS * PGS SWAP IN * PGS SWAP OUT * VIO PGS IN * VIO PGS OUT **
*   004             90   00:00:00.02            0             0        0             0             0             0            0  *
********************************************************************************************************************
*  CPU $ (     0.00) + EXCP $ (     0.01) + MEMORY $ (     0.00) = TOTAL $ (     0.01)                                 *
********************************************************************************************************************
IEF237I 380  ALLOCATED TO SYS00001
IEF285I   SYS20189.T171820.RA000.VSTESTK5.R0000001     KEPT           *--------0
IEF285I   VOL SER NOS= MVS380.
IEF285I   SYS20189.T171820.RA000.VSTESTK5.GODATA       DELETED
IEF285I   VOL SER NOS= MVS380.
IEF375I  JOB /VSTESTK5/ START 20189.1718
IEF376I  JOB /VSTESTK5/ STOP  20189.1718 CPU    0MIN 00.10SEC SRB    0MIN 00.02SEC
```

```
00001   000100 IDENTIFICATION DIVISION.                                         23050000
00002   000200 PROGRAM-ID. KSDSRAND.                                            23060000
00003   000300 AUTHOR. JAY MOSELEY.                                             23070000
00004   000400 DATE-WRITTEN. NOVEMBER, 2001.                                    23080000
00005   000500 DATE-COMPILED. JUL  7,1920.                                      23090000
00006   001200 ENVIRONMENT DIVISION.                                            23160000
00007   001300 CONFIGURATION SECTION.                                           23170000
00008   001400 SOURCE-COMPUTER. IBM-370.                                        23180000
00009   001500 OBJECT-COMPUTER. IBM-370.                                        23190000
00010   001600                                                                  23200000
00011   001700 INPUT-OUTPUT SECTION.                                            23210000
00012   001800 FILE-CONTROL.                                                    23220000
00013   001900                                                                  23230000
00014   002000     SELECT RECORD-IMAGES                                         23240000
00015   002100         ASSIGN TO UR-2540R-S-SYSIN.                              23250000
00016   002200                                                                  23260000
00017   002300 DATA DIVISION.                                                   23270000
00018   002400 FILE SECTION.                                                    23280000
00019   002500                                                                  23290000
00020   002600 FD  RECORD-IMAGES                                                23300000
00021   002700     LABEL RECORDS ARE OMITTED                                    23310000
00022   002800     BLOCK CONTAINS 0 RECORDS                                     23320000
00023   002900     DATA RECORD IS RECORD-IMAGE.                                 23330000
00024   003000                                                                  23340000
00025   003100 01  RECORD-IMAGE.                                               23350000
00026   003200     02  RI-ACTION               PIC X(01).                      23360000
00027   003300         88  ACTION-IS-ADD                 VALUE 'A'.           23370000
00028   003400         88  ACTION-IS-CHANGE              VALUE 'C'.           23380000
00029   003500         88  ACTION-IS-DELETE              VALUE 'D'.           23390000
00030   003600         88  ACTION-IS-VALID               VALUE 'A', 'C', 'D'. 23400000
00031   003700     02  FILLER                  PIC X(01).                      23410000
00032   003800     02  RI-IMAGE                PIC X(78).                      23420000
00033   003900                                                                  23430000
00034   004000 WORKING-STORAGE SECTION.                                         23440000
00035   004100 77  END-OF-FILE-SWITCH          PIC X(1)    VALUE 'N'.          23450000
00036   004200     88  END-OF-FILE                          VALUE 'Y'.          23460000
00037   004300                                                                  23470000
00038   004400 77  RECORD-COUNTER              PIC S9(8)   VALUE +0.           23480000
00039   004500 77  COUNTER-EDIT                PIC ZZ,ZZZ,ZZ9.                 23490000
00040   004600                                                                  23500000
00041   004700 01  VSIO-PARAMETER-VALUES       COPY VSAMIO.                    23510000
00042 C 000100* ************************************************************ *06980000
00043 C 000200*                                                              *06990000
00044 C 000300*        VV   VV  SSSSS     A    M     M  IIII    OOOOO         *07000000
00045 C 000400*        VV   VV SS   SS   AAA   MM   MM   II    OO   OO        *07010000
00046 C 000500*        VV   VV SS       AA AA  MMM MMM   II    OO   OO        *07020000
00047 C 000600*        VV   VV  SSSSS  AA   AA MMMMMMM   II    OO   OO        *07030000
00048 C 000700*        VV   VV      SS AA   AA MM M MM   II    OO   OO        *07040000
00049 C 000800*         VV VV  SS   SS AAAAAAA MM   MM   II    OO   OO        *07050000
00050 C 000900*          VVV   SS   SS AA   AA MM   MM   II    OO   OO        *07060000
00051 C 001000*           V     SSSSS  AA   AA MM   MM  IIII    OOOOO         *07070000
00052 C 001100*                                                              *07080000
00053 C 001200* ************************************************************ *07090000
00054 C 001300*                                                              *07100000
```

```
00055 C 001400* THESE PARAMETERS ARE USED TO INTERFACE WITH THE VSAM DATASET   *07110000
00056 C 001500* ACCESS ROUTINE.                                               *07120000
00057 C 001600*                                                               *07130000
00058 C 001700* THE VSIO-PARAMETER-VALUES SUPPLY THE VALUES USED TO MOVE INTO  *07140000
00059 C 001800* PARAMETER ENTRIES TO TAILOR THE ROUTINE TO A SPECIFIC DATASET  *07150000
00060 C 001900* AND TO PROVIDE COMMANDS TO DRIVE THE ROUTINE.                  *07160000
00061 C 002000* ************************************************************ *07170000
00062 C 002100 01  VSIO-PARAMETER-VALUES.                                      07180000
00063 C 002200     02  VSIO-OPEN               PIC  X(08)  VALUE 'OPEN    '.    07190000
00064 C 002300     02  VSIO-CLOSE              PIC  X(08)  VALUE 'CLOSE   '.    07200000
00065 C 002400     02  VSIO-READ               PIC  X(08)  VALUE 'READ    '.    07210000
00066 C 002500     02  VSIO-WRITE              PIC  X(08)  VALUE 'WRITE   '.    07220000
00067 C 002600     02  VSIO-REWRITE            PIC  X(08)  VALUE 'REWRITE '.    07230000
00068 C 002700     02  VSIO-DELETE             PIC  X(08)  VALUE 'DELETE  '.    07240000
00069 C 002800     02  VSIO-START-KEY-EQUAL    PIC  X(08)  VALUE 'STARTEQ '.    07250000
00070 C 002900     02  VSIO-START-KEY-NOTLESS  PIC  X(08)  VALUE 'STARTGE '.    07260000
00071 C 003000     02  VSIO-KSDS               PIC  X(04)  VALUE 'KSDS'.        07270000
00072 C 003100     02  VSIO-ESDS               PIC  X(04)  VALUE 'ESDS'.        07280000
00073 C 003200     02  VSIO-RRDS               PIC  X(04)  VALUE 'RRDS'.        07290000
00074 C 003300     02  VSIO-SEQUENTIAL         PIC  X(10)  VALUE 'SEQUENTIAL'.  07300000
00075 C 003400     02  VSIO-DIRECT             PIC  X(10)  VALUE 'DIRECT    '.  07310000
00076 C 003500     02  VSIO-DYNAMIC            PIC  X(10)  VALUE 'DYNAMIC   '.  07320000
00077 C 003600     02  VSIO-INPUT              PIC  X(06)  VALUE 'INPUT '.      07330000
00078 C 003700     02  VSIO-OUTPUT             PIC  X(06)  VALUE 'OUTPUT'.      07340000
00079 C 003800     02  VSIO-INPUT-OUTPUT       PIC  X(06)  VALUE 'UPDATE'.      07350000
00080 C 003900                                                                  07360000
00081 C 004000* ************************************************************ *07370000
00082 C 004100* THE VSIO-PARAMETER-BLOCK IS THE COMMUNICATION INTERFACE TO     *07380000
00083 C 004200* THE ROUTINE.                                                  *07390000
00084 C 004300* ************************************************************ *07400000
00085 C 004400 01  VSIO-PARAMETER-BLOCK.                                       07410000
00086 C 004500     02  VSIO-COMMAND            PIC  X(08).                     07420000
00087 C 004600     02  VSIO-RETURN-CODE        PIC S9(04)  COMP.               07430000
00088 C 004700         88  VSIO-SUCCESS                    VALUE +0.          07440000
00089 C 004800         88  VSIO-LOGIC-ERROR                VALUE +8.          07450000
00090 C 004900         88  VSIO-END-OF-FILE                VALUE +9999.       07460000
00091 C 005000         88  VSIO-PARAMETER-ERROR            VALUE +20 THRU +28.07470000
00092 C 005100         88  VSIO-COMMAND-UNKNOWN            VALUE +20.         07480000
00093 C 005200         88  VSIO-DATASET-ALREADY-OPEN       VALUE +21.         07490000
00094 C 005300         88  VSIO-DATASET-NOT-OPEN           VALUE +22.         07500000
00095 C 005400         88  VSIO-ORGANIZATION-KEYWORD       VALUE +23.         07510000
00096 C 005500         88  VSIO-ACCESS-KEYWORD             VALUE +24.         07520000
00097 C 005600         88  VSIO-ACCESS-UNSUPPORTED         VALUE +25.         07530000
00098 C 005700         88  VSIO-MODE-KEYWORD               VALUE +26.         07540000
00099 C 005800         88  VSIO-MODE-UNSUPPORTED           VALUE +27.         07550000
00100 C 005900         88  VSIO-DDNAME-BLANK               VALUE +28.         07560000
00101 C 006000     02  VSIO-VSAM-RETURN-CODE   PIC S9(04)  COMP.               07570000
00102 C 006100     02  VSIO-VSAM-FUNCTION-CODE PIC S9(04)  COMP.               07580000
00103 C 006200     02  VSIO-VSAM-FEEDBACK-CODE PIC S9(04)  COMP.               07590000
00104 C 006300         88  VSIO-DUPLICATE-RECORD           VALUE +8.          07600000
00105 C 006400         88  VSIO-SEQUENCE-ERROR             VALUE +12.         07610000
00106 C 006500         88  VSIO-RECORD-NOT-FOUND           VALUE +16.         07620000
00107 C 006600         88  VSIO-NO-MORE-SPACE              VALUE +28.         07630000
00108 C 006700         88  VSIO-READ-WITHOUT-START         VALUE +88.         07640000
00109 C 006800* ************************************************************ *07650000
00110 C 006900*                    END OF VSAMIO COPY BOOK                   *07660000
00111 C 007000* ************************************************************ *07670000
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00112   004800 01  KSDSF01                        COPY VSAMIOFB.                    23520000
00113 C 000100* ************************************************************ *00000100
00114 C 000200*                                                              *00000200
00115 C 000300*  VV   VV  SSSSS     A    M     M IIII  OOOOO  FFFFFFF BBBBBB   *00000300
00116 C 000400*  VV   VV SS   SS   AAA   MM   MM  II  OO   OO FF      BB   BB  *00000400
00117 C 000500*  VV   VV SS       AA AA  MMM MMM  II  OO   OO FF      BB   BB  *00000500
00118 C 000600*  VV   VV  SSSSS  AA   AA MMMMMMM  II  OO   OO FFFFF   BBBBBB   *00000600
00119 C 000700*  VV   VV      SS AA   AA MM M MM  II  OO   OO FF      BB   BB  *00000700
00120 C 000800*   VV VV  SS   SS AAAAAAA MM   MM  II  OO   OO FF      BB   BB  *00000800
00121 C 000900*    VVV   SS   SS AA   AA MM   MM  II  OO   OO FF      BB   BB  *00000900
00122 C 001000*     V     SSSSS  AA   AA MM   MM IIII  OOOOO  FF      BBBBBB   *00001000
00123 C 001100*                                                              *00001100
00124 C 001200* ************************************************************ *00001200
00125 C 001300* THESE PARAMETERS ARE USED TO INTERFACE WITH THE VSAM DATASET   *00001300
00126 C 001400* ACCESS ROUTINE, AND ARE USED TO COMMUNICATE CHARACTERISTICS    *00001400
00127 C 001500* FOR A SINGLE VSAM DATASET.                                    *00001500
00128 C 001600*                                                              *00001600
00129 C 001700* WITH THE 2 EXCEPTIONS FOR RECORD LENGTH (TO ACCOMODATE        *00001700
00130 C 001800* VARIABLE LENGTH RECORDS) AND RELATIVE RECORD (TO ACCOMODATE    *00001800
00131 C 001900* RELATIVE RECORD DATASETS) THESE DATA NAMES MUST BE POPULATED   *00001900
00132 C 002000* PRIOR TO CALLING THE ROUTINE TO OPEN THE DATASET AND MUST NOT  *00002000
00133 C 002100* THEN BE CHANGED UNTIL THE DATASET HAS BEEN CLOSED.             *00002100
00134 C 002200* ************************************************************ *00002200
00135 C 002300 01  KSDSF01.                                                    00002300
00136 C 002400     02  VSIO-DDNAME             PIC  X(08)  VALUE SPACES.       00002400
00137 C 002500     02  VSIO-ORGANIZATION       PIC  X(04)  VALUE SPACES.       00002500
00138 C 002600     02  VSIO-ACCESS             PIC  X(10)  VALUE SPACES.       00002600
00139 C 002700     02  VSIO-MODE               PIC  X(06)  VALUE SPACES.       00002700
00140 C 002800     02  VSIO-RECORD-LENGTH      PIC S9(04)  COMP VALUE +0.      00002800
00141 C 002900     02  VSIO-KEY-ARGUMENT.                                      00002900
00142 C 003000         03  VSIO-KEY-POSITION   PIC S9(04)  COMP VALUE +0.      00003000
00143 C 003100         03  VSIO-KEY-LENGTH     PIC S9(04)  COMP VALUE +0.      00003100
00144 C 003200     02  VSIO-RELATIVE-RECORD    REDEFINES VSIO-KEY-ARGUMENT     00003200
00145 C 003300                                 PIC S9(08)  COMP.               00003300
00146 C 003400     02  FILLER                  PIC  X(01)  VALUE 'C'.          00003400
00147 C 003500         88  VSIO-FILE-OPEN                  VALUE 'O'.          00003500
00148 C 003600         88  VSIO-FILE-CLOSED                VALUE 'C'.          00003600
00149 C 003700     02  FILLER                  PIC  X(161).                    00003700
00150 C 003800* ************************************************************ *00003800
00151 C 003900*                   END OF VSAMIOFB COPY BOOK                  *00003900
00152 C 004000* ************************************************************ *00004000
00153   004900 01  KSDS-RECORD.                                                23530000
00154   005000     02  KR-KEY                  PIC X(10).                      23540000
00155   005100     02  FILLER                  PIC X(70).                      23550000
00156   005200                                                                 23560000
00157   005300 PROCEDURE DIVISION.                                             23570000
00158   005400                                                                 23580000
00159   005500 000-INITIATE.                                                   23590000
00160   005600                                                                 23600000
00161   005700     DISPLAY 'KSDSRAND: READ/REWRITE KSDS DIRECT'.               23610000
00162   005800     DISPLAY '-----------------------------------'.              23620000
00163   005900     DISPLAY ' '.                                                23630000
00164   006000                                                                 23640000
00165   006100     OPEN INPUT RECORD-IMAGES.                                   23650000
00166   006200                                                                 23660000
00167   006300     MOVE 'KSDSF01' TO VSIO-DDNAME.                              23670000
00168   006400     MOVE VSIO-KSDS TO VSIO-ORGANIZATION.                        23680000
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00169   006500     MOVE VSIO-DIRECT TO VSIO-ACCESS.                      23690000
00170   006600     MOVE VSIO-INPUT-OUTPUT TO VSIO-MODE.                  23700000
00171   006700     MOVE +80 TO VSIO-RECORD-LENGTH.                       23710000
00172   006800     MOVE +0 TO VSIO-KEY-POSITION.                         23720000
00173   006900     MOVE +10 TO VSIO-KEY-LENGTH.                          23730000
00174   007000     MOVE VSIO-OPEN TO VSIO-COMMAND.                       23740000
00175   007100     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,    23750000
00176   007200                         KSDS-RECORD.                      23760000
00177   007300*    END-CALL.                                             23770000
00178   007400     IF NOT VSIO-SUCCESS                                   23780000
00179   007500         DISPLAY 'VSAMIO ERROR OCCURRED DURING '           23790000
00180   007600                 VSIO-COMMAND                              23800000
00181   007700         EXHIBIT NAMED VSIO-RETURN-CODE,                   23810000
00182   007800         EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,              23820000
00183   007900                       VSIO-VSAM-FUNCTION-CODE,            23830000
00184   008000                       VSIO-VSAM-FEEDBACK-CODE             23840000
00185   008100         STOP RUN.                                         23850000
00186   008200*    END-IF.                                               23860000
00187   008300                                                           23870000
00188   008400 010-PROCESS.                                              23880000
00189   008500                                                           23890000
00190   008600     PERFORM 110-PROCESS-UPDATES                           23900000
00191   008700        THRU 119-EXIT                                      23910000
00192   008800       UNTIL END-OF-FILE.                                  23920000
00193   008900*    END-PERFORM.                                          23930000
00194   009000                                                           23940000
00195   009100 020-TERMINATE.                                            23950000
00196   009200                                                           23960000
00197   009300     MOVE VSIO-CLOSE TO VSIO-COMMAND.                      23970000
00198   009400     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,    23980000
00199   009500                         KSDS-RECORD.                      23990000
00200   009600*    END-CALL.                                             24000000
00201   009700     IF NOT VSIO-SUCCESS                                   24010000
00202   009800         DISPLAY 'VSAMIO ERROR OCCURRED DURING '           24020000
00203   009900                 VSIO-COMMAND                              24030000
00204   010000         EXHIBIT NAMED VSIO-RETURN-CODE,                   24040000
00205   010100         EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,              24050000
00206   010200                       VSIO-VSAM-FUNCTION-CODE,            24060000
00207   010300                       VSIO-VSAM-FEEDBACK-CODE.            24070000
00208   010400*    END-IF.                                               24080000
00209   010500                                                           24090000
00210   010600     STOP RUN.                                             24100000
00211   010700                                                           24110000
00212   010800 110-PROCESS-UPDATES.                                      24120000
00213   010900                                                           24130000
00214   011000     READ RECORD-IMAGES                                    24140000
00215   011100         AT END                                            24150000
00216   011200             MOVE 'Y' TO END-OF-FILE-SWITCH.               24160000
00217   011300*    END-READ.                                             24170000
00218   011400                                                           24180000
00219   011500     IF END-OF-FILE                                        24190000
00220   011600         GO TO 119-EXIT.                                   24200000
00221   011700*    END-IF.                                               24210000
00222   011800                                                           24220000
00223   011900     ADD +1 TO RECORD-COUNTER.                             24230000
00224   012000                                                           24240000
00225   012100     IF NOT ACTION-IS-VALID                                24250000
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00226   012200         MOVE RECORD-COUNTER TO COUNTER-EDIT                    24260000
00227   012300         DISPLAY COUNTER-EDIT ': ' RECORD-IMAGE                 24270000
00228   012400         DISPLAY '            *** ACTION INVALID: IGNORED'      24280000
00229   012500         DISPLAY ' '                                            24290000
00230   012600         GO TO 119-EXIT.                                        24300000
00231   012700*    END-IF.                                                    24310000
00232   012800                                                                24320000
00233   012900     IF ACTION-IS-ADD                                           24330000
00234   013000         PERFORM 120-ADD-PROCESS THRU 129-EXIT.                 24340000
00235   013100*    END-IF.                                                    24350000
00236   013200                                                                24360000
00237   013300     IF ACTION-IS-CHANGE                                        24370000
00238   013400         PERFORM 130-CHANGE-PROCESS THRU 139-EXIT.              24380000
00239   013500*    END-IF.                                                    24390000
00240   013600                                                                24400000
00241   013700     IF ACTION-IS-DELETE                                        24410000
00242   013800         PERFORM 140-DELETE-PROCESS THRU 149-EXIT.              24420000
00243   013900*    END-IF.                                                    24430000
00244   014000                                                                24440000
00245   014100 119-EXIT.                                                      24450000
00246   014200     EXIT.                                                      24460000
00247   014300                                                                24470000
00248   014400 120-ADD-PROCESS.                                               24480000
00249   014500                                                                24490000
00250   014600     MOVE RI-IMAGE TO KSDS-RECORD.                              24500000
00251   014700     MOVE VSIO-WRITE TO VSIO-COMMAND.                           24510000
00252   014800     DISPLAY  'ADDING: ' KSDS-RECORD.                           24520000
00253   014900     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,         24530000
00254   015000                         KSDS-RECORD.                           24540000
00255   015100*    END-CALL.                                                  24550000
00256   015200                                                                24560000
00257   015300     IF VSIO-SUCCESS                                            24570000
00258   015400         DISPLAY '               RECORD ADDED'                  24580000
00259   015500     ELSE                                                       24590000
00260   015600         IF VSIO-LOGIC-ERROR                                    24600000
00261   015700        AND VSIO-DUPLICATE-RECORD                               24610000
00262   015800             MOVE VSIO-RELATIVE-RECORD TO COUNTER-EDIT          24620000
00263   015900             DISPLAY '            *** DUPLICATE RECORD ON FILE' 24630000
00264   016000         ELSE                                                   24640000
00265   016100             DISPLAY 'VSAMIO ERROR OCCURRED DURING '            24650000
00266   016200                     VSIO-COMMAND                               24660000
00267   016300             EXHIBIT NAMED VSIO-RETURN-CODE,                    24670000
00268   016400             EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,               24680000
00269   016500                           VSIO-VSAM-FUNCTION-CODE,             24690000
00270   016600                           VSIO-VSAM-FEEDBACK-CODE.             24700000
00271   016700*        END-IF                                                 24710000
00272   016800*    END-IF.                                                    24720000
00273   016900                                                                24730000
00274   017000     DISPLAY ' '.                                               24740000
00275   017100                                                                24750000
00276   017200 129-EXIT.                                                      24760000
00277   017300     EXIT.                                                      24770000
00278   017400                                                                24780000
00279   017500 130-CHANGE-PROCESS.                                            24790000
00280   017600                                                                24800000
00281   017700     PERFORM 150-READ-RECORD THRU 159-EXIT.                     24810000
00282   017800                                                                24820000
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00283   017900     IF VSIO-LOGIC-ERROR                                   24830000
00284   018000     AND VSIO-RECORD-NOT-FOUND                             24840000
00285   018100         DISPLAY '          *** RECORD NOT FOUND'          24850000
00286   018200         DISPLAY ' '                                       24860000
00287   018300         GO TO 139-EXIT.                                   24870000
00288   018400*    END-IF.                                               24880000
00289   018500                                                           24890000
00290   018600     DISPLAY KSDS-RECORD.                                  24900000
00291   018700     DISPLAY '               RECORD BEFORE CHANGE'.        24910000
00292   018800                                                           24920000
00293   018900     MOVE RI-IMAGE TO KSDS-RECORD.                         24930000
00294   019000     MOVE VSIO-REWRITE TO VSIO-COMMAND.                    24940000
00295   019100     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,    24950000
00296   019200                         KSDS-RECORD.                      24960000
00297   019300*    END-CALL.                                             24970000
00298   019400                                                           24980000
00299   019500     IF VSIO-SUCCESS                                       24990000
00300   019600         DISPLAY KSDS-RECORD                               25000000
00301   019700         DISPLAY '               RECORD AFTER CHANGE'      25010000
00302   019800     ELSE                                                  25020000
00303   019900         DISPLAY 'VSAMIO ERROR OCCURRED DURING '           25030000
00304   020000                 VSIO-COMMAND                              25040000
00305   020100         EXHIBIT NAMED VSIO-RETURN-CODE,                   25050000
00306   020200         EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,              25060000
00307   020300                       VSIO-VSAM-FUNCTION-CODE,            25070000
00308   020400                       VSIO-VSAM-FEEDBACK-CODE             25080000
00309   020500*    END-IF                                                25090000
00310   020600                                                           25100000
00311   020700     DISPLAY ' '.                                          25110000
00312   020800                                                           25120000
00313   020900 139-EXIT.                                                 25130000
00314   021000     EXIT.                                                 25140000
00315   021100                                                           25150000
00316   021200 140-DELETE-PROCESS.                                       25160000
00317   021300                                                           25170000
00318   021400     PERFORM 150-READ-RECORD THRU 159-EXIT.                25180000
00319   021500                                                           25190000
00320   021600     IF VSIO-LOGIC-ERROR                                   25200000
00321   021700     AND VSIO-RECORD-NOT-FOUND                             25210000
00322   021800         DISPLAY '          *** RECORD NOT FOUND'          25220000
00323   021900         DISPLAY ' '                                       25230000
00324   022000         GO TO 149-EXIT.                                   25240000
00325   022100*    END-IF.                                               25250000
00326   022200                                                           25260000
00327   022300     DISPLAY KSDS-RECORD.                                  25270000
00328   022400     DISPLAY '               RECORD BEFORE DELETE'.        25280000
00329   022500                                                           25290000
00330   022600     MOVE VSIO-DELETE TO VSIO-COMMAND.                     25300000
00331   022700     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,    25310000
00332   022800                         KSDS-RECORD.                      25320000
00333   022900*    END-CALL.                                             25330000
00334   023000                                                           25340000
00335   023100     IF VSIO-SUCCESS                                       25350000
00336   023200         DISPLAY '             DELETED '                   25360000
00337   023300     ELSE                                                  25370000
00338   023400         DISPLAY 'VSAMIO ERROR OCCURRED DURING '           25380000
00339   023500                 VSIO-COMMAND                              25390000
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00340   023600         EXHIBIT NAMED VSIO-RETURN-CODE,                  25400000
00341   023700         EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,             25410000
00342   023800                       VSIO-VSAM-FUNCTION-CODE,           25420000
00343   023900                       VSIO-VSAM-FEEDBACK-CODE.           25430000
00344   024000*    END-IF.                                              25440000
00345   024100                                                          25450000
00346   024200     DISPLAY ' '.                                         25460000
00347   024300                                                          25470000
00348   024400 149-EXIT.                                                25480000
00349   024500     EXIT.                                                25490000
00350   024600                                                          25500000
00351   024700 150-READ-RECORD.                                         25510000
00352   024800                                                          25520000
00353   024900     MOVE RI-IMAGE TO KSDS-RECORD.                        25530000
00354   025000     DISPLAY 'ATTEMPTING TO READ: ' KR-KEY.               25540000
00355   025100     MOVE VSIO-READ TO VSIO-COMMAND.                      25550000
00356   025200     CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,   25560000
00357   025300                         KSDS-RECORD.                     25570000
00358   025400*    END-CALL.                                            25580000
00359   025500                                                          25590000
00360   025600     IF NOT VSIO-SUCCESS                                  25600000
00361   025700         IF VSIO-LOGIC-ERROR                              25610000
00362   025800        AND VSIO-RECORD-NOT-FOUND                         25620000
00363   025900            NEXT SENTENCE                                 25630000
00364   026000         ELSE                                             25640000
00365   026100             DISPLAY 'VSAMIO ERROR OCCURRED DURING '      25650000
00366   026200                     VSIO-COMMAND                         25660000
00367   026300             EXHIBIT NAMED VSIO-RETURN-CODE,              25670000
00368   026400             EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,         25680000
00369   026500                           VSIO-VSAM-FUNCTION-CODE,       25690000
00370   026600                           VSIO-VSAM-FEEDBACK-CODE.       25700000
00371   026700*        END-IF                                           25710000
00372   026800*    END-IF.                                              25720000
00373   026900                                                          25730000
00374   027000 159-EXIT.                                                25740000
00375   027100     EXIT.                                                25750000
00376   027200                                                          25760000
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INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=1-284	FD	RECORD-IMAGES	DCB=01		DNM=1-284		QSAM				F
DNM=1-313	01	RECORD-IMAGE	BL=1	000	DNM=1-313	DS 0CL80	GROUP				
DNM=1-338	02	RI-ACTION	BL=1	000	DNM=1-338	DS 1C	DISP				
DNM=1-360	88	ACTION-IS-ADD			DNM=1-360						
DNM=1-387	88	ACTION-IS-CHANGE			DNM=1-387						
DNM=1-414	88	ACTION-IS-DELETE			DNM=1-414						
DNM=1-441	88	ACTION-IS-VALID			DNM=1-441						
DNM=1-466	02	FILLER	BL=1	001	DNM=1-466	DS 1C	DISP				
DNM=1-485	02	RI-IMAGE	BL=1	002	DNM=1-485	DS 78C	DISP				
DNM=2-000	77	END-OF-FILE-SWITCH	BL=2	000	DNM=2-000	DS 1C	DISP				
DNM=2-031	88	END-OF-FILE			DNM=2-031						
DNM=2-053	77	RECORD-COUNTER	BL=2	001	DNM=2-053	DS 8C	DISP-NM				
DNM=2-077	77	COUNTER-EDIT	BL=2	009	DNM=2-077	DS 10C	NM-EDIT				
DNM=2-114	01	VSIO-PARAMETER-VALUES	BL=2	018	DNM=2-114	DS 0CL124	GROUP				
DNM=2-148	02	VSIO-OPEN	BL=2	018	DNM=2-148	DS 8C	DISP				
DNM=2-167	02	VSIO-CLOSE	BL=2	020	DNM=2-167	DS 8C	DISP				
DNM=2-187	02	VSIO-READ	BL=2	028	DNM=2-187	DS 8C	DISP				
DNM=2-209	02	VSIO-WRITE	BL=2	030	DNM=2-209	DS 8C	DISP				
DNM=2-229	02	VSIO-REWRITE	BL=2	038	DNM=2-229	DS 8C	DISP				
DNM=2-251	02	VSIO-DELETE	BL=2	040	DNM=2-251	DS 8C	DISP				
DNM=2-272	02	VSIO-START-KEY-EQUAL	BL=2	048	DNM=2-272	DS 8C	DISP				
DNM=2-302	02	VSIO-START-KEY-NOTLESS	BL=2	050	DNM=2-302	DS 8C	DISP				
DNM=2-334	02	VSIO-KSDS	BL=2	058	DNM=2-334	DS 4C	DISP				
DNM=2-353	02	VSIO-ESDS	BL=2	05C	DNM=2-353	DS 4C	DISP				
DNM=2-372	02	VSIO-RRDS	BL=2	060	DNM=2-372	DS 4C	DISP				
DNM=2-391	02	VSIO-SEQUENTIAL	BL=2	064	DNM=2-391	DS 10C	DISP				
DNM=2-416	02	VSIO-DIRECT	BL=2	06E	DNM=2-416	DS 10C	DISP				
DNM=2-437	02	VSIO-DYNAMIC	BL=2	078	DNM=2-437	DS 10C	DISP				
DNM=2-459	02	VSIO-INPUT	BL=2	082	DNM=2-459	DS 6C	DISP				
DNM=2-479	02	VSIO-OUTPUT	BL=2	088	DNM=2-479	DS 6C	DISP				
DNM=3-000	02	VSIO-INPUT-OUTPUT	BL=2	08E	DNM=3-000	DS 6C	DISP				
DNM=3-027	01	VSIO-PARAMETER-BLOCK	BL=2	098	DNM=3-027	DS 0CL16	GROUP				
DNM=3-060	02	VSIO-COMMAND	BL=2	098	DNM=3-060	DS 8C	DISP				
DNM=3-085	02	VSIO-RETURN-CODE	BL=2	0A0	DNM=3-085	DS 2C	COMP				
DNM=3-114	88	VSIO-SUCCESS			DNM=3-114						
DNM=3-139	88	VSIO-LOGIC-ERROR			DNM=3-139						
DNM=3-168	88	VSIO-END-OF-FILE			DNM=3-168						
DNM=3-199	88	VSIO-PARAMETER-ERROR			DNM=3-199						
DNM=3-229	88	VSIO-COMMAND-UNKNOWN			DNM=3-229						
DNM=3-263	88	VSIO-DATASET-ALREADY-OPEN			DNM=3-263						
DNM=3-302	88	VSIO-DATASET-NOT-OPEN			DNM=3-302						
DNM=3-337	88	VSIO-ORGANIZATION-KEYWORD			DNM=3-337						
DNM=3-376	88	VSIO-ACCESS-KEYWORD			DNM=3-376						
DNM=3-409	88	VSIO-ACCESS-UNSUPPORTED			DNM=3-409						
DNM=3-446	88	VSIO-MODE-KEYWORD			DNM=3-446						
DNM=4-000	88	VSIO-MODE-UNSUPPORTED			DNM=4-000						
DNM=4-035	88	VSIO-DDNAME-BLANK			DNM=4-035						
DNM=4-066	02	VSIO-VSAM-RETURN-CODE	BL=2	0A2	DNM=4-066	DS 2C	COMP				
DNM=4-097	02	VSIO-VSAM-FUNCTION-CODE	BL=2	0A4	DNM=4-097	DS 2C	COMP				
DNM=4-130	02	VSIO-VSAM-FEEDBACK-CODE	BL=2	0A6	DNM=4-130	DS 2C	COMP				
DNM=4-166	88	VSIO-DUPLICATE-RECORD			DNM=4-166						
DNM=4-200	88	VSIO-SEQUENCE-ERROR			DNM=4-200						
DNM=4-233	88	VSIO-RECORD-NOT-FOUND			DNM=4-233						
DNM=4-268	88	VSIO-NO-MORE-SPACE			DNM=4-268						
DNM=4-300	88	VSIO-READ-WITHOUT-START			DNM=4-300						

INTRNL NAME	LVL	SOURCE NAME	BASE	DISPL	INTRNL NAME	DEFINITION	USAGE	R	O	Q	M
DNM=4-337	01	KSDSF01	BL=2	0A8	DNM=4-337	DS 0CL196	GROUP				
DNM=4-357	02	VSIO-DDNAME	BL=2	0A8	DNM=4-357	DS 8C	DISP				
DNM=4-378	02	VSIO-ORGANIZATION	BL=2	0B0	DNM=4-378	DS 4C	DISP				
DNM=4-405	02	VSIO-ACCESS	BL=2	0B4	DNM=4-405	DS 10C	DISP				
DNM=4-426	02	VSIO-MODE	BL=2	0BE	DNM=4-426	DS 6C	DISP				
DNM=4-448	02	VSIO-RECORD-LENGTH	BL=2	0C4	DNM=4-448	DS 2C	COMP				
DNM=4-476	02	VSIO-KEY-ARGUMENT	BL=2	0C6	DNM=4-476	DS 0CL4	GROUP				
DNM=5-000	03	VSIO-KEY-POSITION	BL=2	0C6	DNM=5-000	DS 2C	COMP				
DNM=5-030	03	VSIO-KEY-LENGTH	BL=2	0C8	DNM=5-030	DS 2C	COMP				
DNM=5-055	02	VSIO-RELATIVE-RECORD	BL=2	0C6	DNM=5-055	DS 4C	COMP	R			
DNM=5-085	02	FILLER	BL=2	0CA	DNM=5-085	DS 1C	DISP				
DNM=5-107	88	VSIO-FILE-OPEN			DNM=5-107						
DNM=5-132	88	VSIO-FILE-CLOSED			DNM=5-132						
DNM=5-159	02	FILLER	BL=2	0CB	DNM=5-159	DS 161C	DISP				
DNM=5-178	01	KSDS-RECORD	BL=2	170	DNM=5-178	DS 0CL80	GROUP				
DNM=5-202	02	KR-KEY	BL=2	170	DNM=5-202	DS 10C	DISP				
DNM=5-218	02	FILLER	BL=2	17A	DNM=5-218	DS 70C	DISP				

```
  10

*STATISTICS*     SOURCE RECORDS =   376     DATA DIVISION STATEMENTS =    74     PROCEDURE DIVISION STATEMENTS =   107
*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
```

```
F64-LEVEL LINKAGE EDITOR OPTIONS SPECIFIED LIST,XREF,LET
         DEFAULT OPTION(S) USED -  SIZE=(231424,55296)




                                        CROSS REFERENCE TABLE


  CONTROL SECTION                       ENTRY

    NAME    ORIGIN  LENGTH                NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  KSDSRAND      00    12E0
  ILBODSP0*   12E0     700
  ILBOSTP0*   19E0      35
                                        ILBOSTP1    19F6
  VSAMIO  *   1A18     D0A




  LOCATION  REFERS TO SYMBOL  IN CONTROL SECTION            LOCATION  REFERS TO SYMBOL  IN CONTROL SECTION
      540           ILBOSTP0        ILBOSTP0                  544           ILBODSP0        ILBODSP0
      548           VSAMIO          VSAMIO                    54C           ILBOSTP1        ILBOSTP0

 ENTRY ADDRESS       00

  TOTAL LENGTH      2728
****RUN       DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
AUTHORIZATION CODE IS         0.
```

```
KSDSRAND: READ/REWRITE KSDS DIRECT
----------------------------------

ADDING: 9532957501 JOHN J GLASSMAN      7663 SEASIDE AVENUE        NEWPORT BEACH   CA
              RECORD ADDED

ADDING: 1964475502 CAITLIN V BROCKTON   9540 PARKER COURT          KANSAS CITY     MO
              RECORD ADDED

ADDING: 9441505503 SUE P MOORE          640 JACKSON STREET         LOS ANGELES     CA
              RECORD ADDED

ADDING: 0045557001 LARRY E BENSON       4778 DESERT STREET         LA HABRA        CA
           *** DUPLICATE RECORD ON FILE

ATTEMPTING TO READ: 5500563505
          *** RECORD NOT FOUND

ATTEMPTING TO READ: 9966129028
          *** RECORD NOT FOUND

ATTEMPTING TO READ: 9441505503
9441505503 SUE P MOORE          640 JACKSON STREET         LOS ANGELES     CA
              RECORD BEFORE CHANGE
9441505503 CLARA B ALEXANDER    8427 PECAN VALLEY STREET   BOISE           ID
              RECORD AFTER CHANGE
ATTEMPTING TO READ: 3849060508
          *** RECORD NOT FOUND

ATTEMPTING TO READ: 3129003066
3129003066 BILL W BECK          1798 SEABREEZE AVENUE      BOSTON          MA
               RECORD BEFORE DELETE
             DELETED
```