

IDENTIFICATION DIVISION.

PROGRAM-ID. UPDT01N.

DATE-WRITTEN. JUNE, 2025.

DATE-COMPILED.

REMARKS. READ UPDATE RECORDS FROM TAPE,
 APPLY UPDATES TO VSAM KSDS CLUSTER,
 REPORT UPDATES APPLIED AND ERRORS ENCOUNTERED.

ENVIRONMENT DIVISION.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT UPDATES-FILE

ASSIGN TO UPDATEI.

SELECT STUDENT-MASTER-FILE

ASSIGN TO STMASTU

ORGANIZATION IS INDEXED

ACCESS IS RANDOM

RECORD KEY IS SMR-STUDENT-NUMBER

FILE STATUS IS STMASTU-STATUS.

SELECT REPORT-FILE

ASSIGN TO S-REPORT.

DATA DIVISION.

FILE SECTION.

FD UPDATES-FILE

LABEL RECORDS STANDARD

RECORD CONTAINS 151 CHARACTERS

BLOCK CONTAINS 10 RECORDS

DATA RECORD IS UPDATES-DATA-RECORD.

01 UPDATES-DATA-RECORD.

02 UDR-TYPE PIC X(01).

88 ACTION-IS-ADD VALUE 'A'.

88 ACTION-IS-CHANGE VALUE 'C'.

88 ACTION-IS-DELETE VALUE 'D'.

88 ACTION-IS-VALID VALUE 'A', 'C', 'D'.

02 UDR-CHANGE-FIELDS PIC X(150).

FD STUDENT-MASTER-FILE

RECORD CONTAINS 150 CHARACTERS

DATA RECORD IS STUDENT-MASTER-RECORD.

01 STUDENT-MASTER-RECORD.

02 SMR-STUDENT-NUMBER PIC X(09).

02 FILLER PIC X(141).

IDENTIFICATION DIVISION.

PROGRAM-ID. UPDT01V.

DATE-WRITTEN. JULY, 2025.

DATE-COMPILED.

REMARKS. READ UPDATE RECORDS FROM TAPE,
 APPLY UPDATES TO VSAM KSDS CLUSTER,
 REPORT UPDATES APPLIED AND ERRORS ENCOUNTERED.

ENVIRONMENT DIVISION.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT UPDATES-FILE

ASSIGN TO UT-S-UPDATEI.

SELECT REPORT-FILE

ASSIGN TO UR-S-REPORT.

DATA DIVISION.

FILE SECTION.

FD UPDATES-FILE

LABEL RECORDS STANDARD

RECORD CONTAINS 151 CHARACTERS

BLOCK CONTAINS 10 RECORDS

DATA RECORD IS UPDATES-DATA-RECORD.

01 UPDATES-DATA-RECORD.

02 UDR-TYPE PIC X(01).

88 ACTION-IS-ADD VALUE 'A'.

88 ACTION-IS-CHANGE VALUE 'C'.

88 ACTION-IS-DELETE VALUE 'D'.

88 ACTION-IS-VALID VALUE 'A', 'C', 'D'.

02 UDR-CHANGE-FIELDS PIC X(150).

FD REPORT-FILE

LABEL RECORDS STANDARD

REPORT IS UPDATE-REPORT.

WORKING-STORAGE SECTION.

01 UPDATES-FILE-EOF-SW PIC X VALUE 'N'.
 88 UPDATES-FILE-EOF VALUE 'Y'.
 88 UPDATES-FILE-NOT-EOF VALUE 'N'.

01 STUDENT-MASTER-EXISTS-SW PIC X VALUE 'U'.
 88 STUDENT-MASTER-UNKNOWN VALUE 'U'.
 88 STUDENT-MASTER-EXISTS VALUE 'Y'.
 88 STUDENT-MASTER-NOT-EXISTS VALUE 'N'.

01 STMASTU-STATUS PIC X(02).

01 WS-STATUS-MESSAGE PIC X(40).

01 WS-UPDATE-TYPE PIC X(07).

01 Y2K-GETD-PARAMETERS.

02 Y2K-GETDP-DATE-G PIC 9(8).
 02 Y2K-GETDP-DATE-J PIC 9(7).
 02 Y2K-GETDP-ANUM PIC S9(7).
 02 Y2K-GETDP-CLOCK PIC 9(8).
 02 FILLER REDEFINES Y2K-GETDP-CLOCK.
 03 Y2K-GETDP-CLOCK-HH PIC 9(2).
 03 Y2K-GETDP-CLOCK-MM PIC 9(2).
 03 Y2K-GETDP-CLOCK-SS PIC 9(2).
 03 Y2K-GETDP-CLOCK-T PIC 9(1).
 03 Y2K-GETDP-CLOCK-H PIC 9(1).
 02 Y2K-GETDP-CLOCK12 PIC X(11).

01 Y2K-DFMT-PARAMETERS.

02 Y2K-DFMTP-DATEIN PIC X(8).
 02 Y2K-DFMTP-MAJOR PIC X(1).
 02 Y2K-DFMTP-MINOR PIC X(1).
 02 Y2K-DFMTP-RETURN-CODE PIC 9(1).
 02 Y2K-DFMTP-OUTPUT-SIZE PIC S9(2).
 02 Y2K-DFMTP-OUTPUT PIC X(29).

01 UPDATES-COUNT PIC 9(5) VALUE 0.

01 ERROR-COUNT PIC 9(5) VALUE 0.

01 ADDITIONS-COUNT PIC 9(5) VALUE 0.

01 CHANGES-COUNT PIC 9(5) VALUE 0.

01 DELETIONS-COUNT PIC 9(5) VALUE 0.

FD REPORT-FILE

LABEL RECORDS OMITTED

REPORT IS UPDATE-REPORT.

WORKING-STORAGE SECTION.

01 UPDATES-FILE-EOF-SW PIC X VALUE 'N'.
 88 UPDATES-FILE-EOF VALUE 'Y'.
 88 UPDATES-FILE-NOT-EOF VALUE 'N'.

01 STUDENT-MASTER-EXISTS-SW PIC X VALUE 'U'.
 88 STUDENT-MASTER-UNKNOWN VALUE 'U'.
 88 STUDENT-MASTER-EXISTS VALUE 'Y'.
 88 STUDENT-MASTER-NOT-EXISTS VALUE 'N'.

01 WS-STATUS-MESSAGE PIC X(40).

01 WS-UPDATE-TYPE PIC X(07).

01 Y2K-GETD-PARAMETERS.

02 Y2K-GETDP-DATE-G PIC 9(8).
 02 Y2K-GETDP-DATE-J PIC 9(7).
 02 Y2K-GETDP-ANUM PIC S9(7).
 02 Y2K-GETDP-CLOCK PIC 9(8).
 02 FILLER REDEFINES Y2K-GETDP-CLOCK.
 03 Y2K-GETDP-CLOCK-HH PIC 9(2).
 03 Y2K-GETDP-CLOCK-MM PIC 9(2).
 03 Y2K-GETDP-CLOCK-SS PIC 9(2).
 03 Y2K-GETDP-CLOCK-T PIC 9(1).
 03 Y2K-GETDP-CLOCK-H PIC 9(1).
 02 Y2K-GETDP-CLOCK12 PIC X(11).

01 Y2K-DFMT-PARAMETERS.

02 Y2K-DFMTP-DATEIN PIC X(8).
 02 Y2K-DFMTP-MAJOR PIC X(1).
 02 Y2K-DFMTP-MINOR PIC X(1).
 02 Y2K-DFMTP-RETURN-CODE PIC 9(1).
 02 Y2K-DFMTP-OUTPUT-SIZE PIC S9(2).
 02 Y2K-DFMTP-OUTPUT PIC X(29).

01 UPDATES-COUNT PIC 9(5) VALUE 0.

01 ERROR-COUNT PIC 9(5) VALUE 0.

01 ADDITIONS-COUNT PIC 9(5) VALUE 0.

01 CHANGES-COUNT PIC 9(5) VALUE 0.

01 DELETIONS-COUNT PIC 9(5) VALUE 0.

01 VSIO-PARAMETER-VALUES COPY VSAMIO.

01 KSDSF01 COPY VSAMIOFB.

				01	STUDENT-MASTER-RECORD	COPY 'STMASTER'.
01	FIELD-UPDATE-FLAGS.			01	FIELD-UPDATE-FLAGS.	
02	FUF-FIRST-NAME	PIC X.		02	FUF-FIRST-NAME	PIC X.
02	FUF-MINITIAL	PIC X.		02	FUF-MINITIAL	PIC X.
02	FUF-LAST-NAME	PIC X.		02	FUF-LAST-NAME	PIC X.
02	FUF-STREET	PIC X.		02	FUF-STREET	PIC X.
02	FUF-CITY	PIC X.		02	FUF-CITY	PIC X.
02	FUF-STATE	PIC X.		02	FUF-STATE	PIC X.
02	FUF-ZIPCODE	PIC X.		02	FUF-ZIPCODE	PIC X.
02	FUF-BIRTH-DATE	PIC X.		02	FUF-BIRTH-DATE	PIC X.
02	FUF-ENROLL-DATE	PIC X.		02	FUF-ENROLL-DATE	PIC X.
02	FUF-CONTACT-DATE	PIC X.		02	FUF-CONTACT-DATE	PIC X.
02	FUF-GENDER	PIC X.		02	FUF-GENDER	PIC X.
02	FUF-SORT-NAME	PIC X.		02	FUF-SORT-NAME	PIC X.
COPY 'STMASTER'				01	UPDATE-FIELDS	COPY 'STMASTER'.
REPLACING SI-MASTER-RECORD BY UPDATE-FIELDS.						
COPY 'STMASTER'				01	PRIOR-FIELDS	COPY 'STMASTER'.
REPLACING SI-MASTER-RECORD BY PRIOR-FIELDS.						
COPY 'STMASTER'.						
01	WS-SORT-NAME.			01	WS-SORT-NAME.	
02	WSSN-CH	OCCURS 30 TIMES		02	WSSN-CH	OCCURS 30 TIMES
		INDEXED BY WSSN-IX				INDEXED BY WSSN-IX
		PIC X.				PIC X.
01	WS-SOURCE.			01	WS-SOURCE.	
02	WSS-CH	OCCURS 11 TIMES		02	WSS-CH	OCCURS 11 TIMES
		INDEXED BY WSS-IX				INDEXED BY WSS-IX
		PIC X.				PIC X.
REPORT SECTION.				REPORT SECTION.		
RD UPDATE-REPORT				RD UPDATE-REPORT		
PAGE LIMIT IS 66 LINES				PAGE LIMIT IS 66 LINES		
HEADING 2				HEADING 2		
FIRST DETAIL 5				FIRST DETAIL 5		
LAST DETAIL 58.				LAST DETAIL 58.		
01	PAGE-HEAD-GROUP TYPE PAGE HEADING.			01	PAGE-HEAD-GROUP TYPE PAGE HEADING.	
02	LINE 2.			02	LINE 2.	
03	COLUMN 01	PIC X(10)	SOURCE Y2K-DFMTP-OUTPUT.	03	COLUMN 01	PIC X(10) SOURCE Y2K-DFMTP-OUTPUT.
03	COLUMN 15	PIC X(03)	VALUE '(N)'.	03	COLUMN 15	PIC X(03) VALUE '(V)'.
03	COLUMN 24	PIC X(07)	VALUE 'Student'.	03	COLUMN 24	PIC X(07) VALUE 'Student'.
03	COLUMN 34	PIC X(06)	VALUE 'Master'.	03	COLUMN 34	PIC X(06) VALUE 'Master'.
03	COLUMN 43	PIC X(06)	VALUE 'Update'.	03	COLUMN 43	PIC X(06) VALUE 'Update'.
03	COLUMN 52	PIC X(06)	VALUE 'Report'.	03	COLUMN 52	PIC X(06) VALUE 'Report'.

```

03 COLUMN 71 PIC X(04) VALUE 'Page'.
03 COLUMN 76 PIC Z,ZZ9 SOURCE PAGE-COUNTER.
02 LINE 3.
03 COLUMN 01 PIC X(11) SOURCE Y2K-GETDP-CLOCK12.

01 UPDATE-DETAIL TYPE DETAIL.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(09) SOURCE SI-STUDENT-NUMBER
      OF UPDATE-FIELDS.
03 COLUMN 14 PIC X(01) SOURCE UDR-TYPE.
03 COLUMN 16 PIC X(07) SOURCE WS-UPDATE-TYPE.
03 COLUMN 40 PIC X(40) SOURCE WS-STATUS-MESSAGE.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(11) SOURCE SI-FIRST-NAME
      OF PRIOR-FIELDS.
03 COLUMN 16 PIC X(01) SOURCE SI-MINITIAL
      OF PRIOR-FIELDS.
03 COLUMN 28 PIC X(10) SOURCE SI-LAST-NAME
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-FIRST-NAME.
03 COLUMN 46 PIC X(11) SOURCE SI-FIRST-NAME
      OF SI-MASTER-RECORD.
03 COLUMN 58 PIC X(01) SOURCE FUF-MINITIAL.
03 COLUMN 60 PIC X(01) SOURCE SI-MINITIAL
      OF SI-MASTER-RECORD.
03 COLUMN 62 PIC X(01) SOURCE FUF-LAST-NAME.
03 COLUMN 64 PIC X(10) SOURCE SI-LAST-NAME
      OF SI-MASTER-RECORD.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(35) SOURCE SI-STREET
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-STREET.
03 COLUMN 46 PIC X(35) SOURCE SI-STREET
      OF SI-MASTER-RECORD.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(20) SOURCE SI-CITY
      OF PRIOR-FIELDS.
03 COLUMN 25 PIC X(02) SOURCE SI-STATE
      OF PRIOR-FIELDS.
03 COLUMN 28 PIC X(05) SOURCE SI-ZIPCODE
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-CITY.
03 COLUMN 46 PIC X(20) SOURCE SI-CITY
      OF SI-MASTER-RECORD.
03 COLUMN 67 PIC X(01) SOURCE FUF-STATE.
03 COLUMN 69 PIC X(02) SOURCE SI-STATE
      OF SI-MASTER-RECORD.
03 COLUMN 72 PIC X(01) SOURCE FUF-ZIPCODE.
03 COLUMN 74 PIC X(05) SOURCE SI-ZIPCODE

```

```

03 COLUMN 71 PIC X(04) VALUE 'Page'.
03 COLUMN 76 PIC Z,ZZ9 SOURCE PAGE-COUNTER.
02 LINE 3.
03 COLUMN 01 PIC X(11) SOURCE Y2K-GETDP-CLOCK12.

01 UPDATE-DETAIL TYPE DETAIL.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(09) SOURCE SI-STUDENT-NUMBER
      OF UPDATE-FIELDS.
03 COLUMN 14 PIC X(01) SOURCE UDR-TYPE.
03 COLUMN 16 PIC X(07) SOURCE WS-UPDATE-TYPE.
03 COLUMN 40 PIC X(40) SOURCE WS-STATUS-MESSAGE.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(11) SOURCE SI-FIRST-NAME
      OF PRIOR-FIELDS.
03 COLUMN 16 PIC X(01) SOURCE SI-MINITIAL
      OF PRIOR-FIELDS.
03 COLUMN 28 PIC X(10) SOURCE SI-LAST-NAME
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-FIRST-NAME.
03 COLUMN 46 PIC X(11) SOURCE SI-FIRST-NAME
      OF STUDENT-MASTER-RECORD.
03 COLUMN 58 PIC X(01) SOURCE FUF-MINITIAL.
03 COLUMN 60 PIC X(01) SOURCE SI-MINITIAL
      OF STUDENT-MASTER-RECORD.
03 COLUMN 62 PIC X(01) SOURCE FUF-LAST-NAME.
03 COLUMN 64 PIC X(10) SOURCE SI-LAST-NAME
      OF STUDENT-MASTER-RECORD.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(35) SOURCE SI-STREET
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-STREET.
03 COLUMN 46 PIC X(35) SOURCE SI-STREET
      OF STUDENT-MASTER-RECORD.
02 LINE PLUS 1.
03 COLUMN 04 PIC X(20) SOURCE SI-CITY
      OF PRIOR-FIELDS.
03 COLUMN 25 PIC X(02) SOURCE SI-STATE
      OF PRIOR-FIELDS.
03 COLUMN 28 PIC X(05) SOURCE SI-ZIPCODE
      OF PRIOR-FIELDS.
03 COLUMN 44 PIC X(01) SOURCE FUF-CITY.
03 COLUMN 46 PIC X(20) SOURCE SI-CITY
      OF STUDENT-MASTER-RECORD.
03 COLUMN 67 PIC X(01) SOURCE FUF-STATE.
03 COLUMN 69 PIC X(02) SOURCE SI-STATE
      OF STUDENT-MASTER-RECORD.
03 COLUMN 72 PIC X(01) SOURCE FUF-ZIPCODE.
03 COLUMN 74 PIC X(05) SOURCE SI-ZIPCODE

```

OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
02	LINE PLUS 1.			02	LINE PLUS 1.		
03	COLUMN 04	PIC X(08)	SOURCE SI-BIRTH-DATE OF PRIOR-FIELDS.	03	COLUMN 04	PIC X(08)	SOURCE SI-BIRTH-DATE OF PRIOR-FIELDS.
03	COLUMN 13	PIC X(08)	SOURCE SI-ENROLL-DATE OF PRIOR-FIELDS.	03	COLUMN 13	PIC X(08)	SOURCE SI-ENROLL-DATE OF PRIOR-FIELDS.
03	COLUMN 22	PIC X(08)	SOURCE SI-CONTACT-DATE OF PRIOR-FIELDS.	03	COLUMN 22	PIC X(08)	SOURCE SI-CONTACT-DATE OF PRIOR-FIELDS.
03	COLUMN 31	PIC X(01)	SOURCE SI-GENDER OF PRIOR-FIELDS.	03	COLUMN 31	PIC X(01)	SOURCE SI-GENDER OF PRIOR-FIELDS.
03	COLUMN 44	PIC X(01)	SOURCE FUF-BIRTH-DATE.	03	COLUMN 44	PIC X(01)	SOURCE FUF-BIRTH-DATE.
03	COLUMN 46	PIC X(08)	SOURCE SI-BIRTH-DATE	03	COLUMN 46	PIC X(08)	SOURCE SI-BIRTH-DATE
OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
03	COLUMN 55	PIC X(01)	SOURCE FUF-ENROLL-DATE.	03	COLUMN 55	PIC X(01)	SOURCE FUF-ENROLL-DATE.
03	COLUMN 57	PIC X(08)	SOURCE SI-ENROLL-DATE	03	COLUMN 57	PIC X(08)	SOURCE SI-ENROLL-DATE
OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
03	COLUMN 66	PIC X(01)	SOURCE FUF-CONTACT-DATE.	03	COLUMN 66	PIC X(01)	SOURCE FUF-CONTACT-DATE.
03	COLUMN 67	PIC X(08)	SOURCE SI-CONTACT-DATE	03	COLUMN 67	PIC X(08)	SOURCE SI-CONTACT-DATE
OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
03	COLUMN 77	PIC X(01)	SOURCE FUF-GENDER.	03	COLUMN 77	PIC X(01)	SOURCE FUF-GENDER.
03	COLUMN 79	PIC X(01)	SOURCE SI-GENDER	03	COLUMN 79	PIC X(01)	SOURCE SI-GENDER
OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
02	LINE PLUS 1.			02	LINE PLUS 1.		
03	COLUMN 04	PIC X(30)	SOURCE SI-SORT-NAME OF PRIOR-FIELDS.	03	COLUMN 04	PIC X(30)	SOURCE SI-SORT-NAME OF PRIOR-FIELDS.
03	COLUMN 44	PIC X(01)	SOURCE FUF-SORT-NAME.	03	COLUMN 44	PIC X(01)	SOURCE FUF-SORT-NAME.
03	COLUMN 46	PIC X(30)	SOURCE SI-SORT-NAME	03	COLUMN 46	PIC X(30)	SOURCE SI-SORT-NAME
OF SI-MASTER-RECORD.				OF STUDENT-MASTER-RECORD.			
02	LINE PLUS 2.			02	LINE PLUS 2.		
01	LOAD-SUMMARY TYPE REPORT FOOTING.			01	LOAD-SUMMARY TYPE REPORT FOOTING.		
02	LINE 2.			02	LINE 2.		
03	COLUMN 01	PIC X(10)	SOURCE Y2K-DFMTP-OUTPUT.	03	COLUMN 01	PIC X(10)	SOURCE Y2K-DFMTP-OUTPUT.
03	COLUMN 15	PIC X(03)	VALUE '(N)'.	03	COLUMN 15	PIC X(03)	VALUE '(V)'.
03	COLUMN 24	PIC X(07)	VALUE 'Student'.	03	COLUMN 24	PIC X(07)	VALUE 'Student'.
03	COLUMN 34	PIC X(06)	VALUE 'Master'.	03	COLUMN 34	PIC X(06)	VALUE 'Master'.
03	COLUMN 43	PIC X(06)	VALUE 'Update'.	03	COLUMN 43	PIC X(06)	VALUE 'Update'.
03	COLUMN 52	PIC X(06)	VALUE 'Report'.	03	COLUMN 52	PIC X(06)	VALUE 'Report'.
03	COLUMN 71	PIC X(04)	VALUE 'Page'.	03	COLUMN 71	PIC X(04)	VALUE 'Page'.
03	COLUMN 76	PIC Z,ZZ9	SOURCE PAGE-COUNTER.	03	COLUMN 76	PIC Z,ZZ9	SOURCE PAGE-COUNTER.
02	LINE 3.			02	LINE 3.		
03	COLUMN 01	PIC X(11)	SOURCE Y2K-GETDP-CLOCK12.	03	COLUMN 01	PIC X(11)	SOURCE Y2K-GETDP-CLOCK12.
02	LINE 6.			02	LINE 6.		
03	COLUMN 13	PIC ZZ,ZZ9	SOURCE UPDATES-COUNT.	03	COLUMN 13	PIC ZZ,ZZ9	SOURCE UPDATES-COUNT.
03	COLUMN 20	PIC X(30)	VALUE 'Records read from UPDATEI'.	03	COLUMN 20	PIC X(30)	VALUE 'Records read from UPDATEI'.
02	LINE PLUS 2.			02	LINE PLUS 2.		
03	COLUMN 13	PIC ZZ,ZZ9	SOURCE ERROR-COUNT.	03	COLUMN 13	PIC ZZ,ZZ9	SOURCE ERROR-COUNT.
03	COLUMN 20	PIC X(30)	VALUE	03	COLUMN 20	PIC X(30)	VALUE

updt01n - updt01v

```
'Records rejected with errors'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE ADDITIONS-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records added to STMASTU'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE CHANGES-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records changed in STMASTU'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE DELETIONS-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records deleted from STMASTU'.
```

PROCEDURE DIVISION.

0000-MAIN SECTION.

0000-UPDATE-STUDENT-FILE.

```
CALL 'Y2KGETD' USING Y2K-GETD-PARAMETERS.
MOVE Y2K-GETDP-DATE-G TO Y2K-DFMTP-DATEIN.
MOVE '1' TO Y2K-DFMTP-MAJOR.
MOVE '3' TO Y2K-DFMTP-MINOR.
CALL 'Y2KDFMT' USING Y2K-DFMT-PARAMETERS.
```

```
OPEN INPUT UPDATES-FILE,
I-O STUDENT-MASTER-FILE,
OUTPUT REPORT-FILE.
```

```
'Records rejected with errors'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE ADDITIONS-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records added to STMASTU'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE CHANGES-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records changed in STMASTU'.
02 LINE PLUS 2.
03 COLUMN 13 PIC ZZ,ZZ9 SOURCE DELETIONS-COUNT.
03 COLUMN 20 PIC X(30) VALUE
'Records deleted from STMASTU'.
```

PROCEDURE DIVISION.

0000-MAIN SECTION.

0000-UPDATE-STUDENT-FILE.

```
CALL 'Y2KGETD' USING Y2K-GETD-PARAMETERS.
MOVE Y2K-GETDP-DATE-G TO Y2K-DFMTP-DATEIN.
MOVE '1' TO Y2K-DFMTP-MAJOR.
MOVE '3' TO Y2K-DFMTP-MINOR.
CALL 'Y2KDFMT' USING Y2K-DFMT-PARAMETERS.
```

```
OPEN INPUT UPDATES-FILE,
OUTPUT REPORT-FILE.
```

```
MOVE 'STMASTU' TO VSIO-DDNAME.
MOVE VSIO-KSDS TO VSIO-ORGANIZATION.
MOVE VSIO-DIRECT TO VSIO-ACCESS.
MOVE VSIO-INPUT-OUTPUT TO VSIO-MODE.
MOVE +150 TO VSIO-RECORD-LENGTH.
MOVE +0 TO VSIO-KEY-POSITION.
MOVE +9 TO VSIO-KEY-LENGTH.
MOVE VSIO-OPEN TO VSIO-COMMAND.
CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
STUDENT-MASTER-RECORD.
IF NOT VSIO-SUCCESS
DISPLAY 'VSAMIO ERROR OCCURRED DURING '
VSIO-COMMAND
EXHIBIT NAMED VSIO-RETURN-CODE,
EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
VSIO-VSAM-FUNCTION-CODE,
VSIO-VSAM-FEEDBACK-CODE
MOVE +12 TO RETURN-CODE
STOP RUN.
```

INITIATE UPDATE-REPORT.

PERFORM 1100-READ-UPDATES-FILE

UNTIL UPDATES-FILE-EOF.

TERMINATE UPDATE-REPORT.

CLOSE UPDATES-FILE,
STUDENT-MASTER-FILE,
REPORT-FILE.

GOBACK.

1000-LEVEL-1-ROUTINES SECTION.

1100-READ-UPDATES-FILE.

READ UPDATES-FILE
AT END MOVE 'Y' TO UPDATES-FILE-EOF-SW.

IF UPDATES-FILE-NOT-EOF

PERFORM 2100-PROCESS-UPDATE-RECORD.

2000-LEVEL-2-ROUTINES SECTION.

2100-PROCESS-UPDATE-RECORD.

ADD 1 TO UPDATES-COUNT.

MOVE SPACES TO FIELD-UPDATE-FLAGS,
PRIOR-FIELDS.

INITIATE UPDATE-REPORT.

PERFORM 1100-READ-UPDATES-FILE

THRU 1199-EXIT

UNTIL UPDATES-FILE-EOF.

TERMINATE UPDATE-REPORT.

CLOSE UPDATES-FILE,
REPORT-FILE.

MOVE VSIO-CLOSE TO VSIO-COMMAND.
CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
STUDENT-MASTER-RECORD.

IF NOT VSIO-SUCCESS

DISPLAY 'VSAMIO ERROR OCCURRED DURING '
VSIO-COMMAND

EXHIBIT NAMED VSIO-RETURN-CODE,
EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
VSIO-VSAM-FUNCTION-CODE,
VSIO-VSAM-FEEDBACK-CODE

MOVE +12 TO RETURN-CODE.

GOBACK.

1000-LEVEL-1-ROUTINES SECTION.

1100-READ-UPDATES-FILE.

READ UPDATES-FILE
AT END MOVE 'Y' TO UPDATES-FILE-EOF-SW.

IF UPDATES-FILE-NOT-EOF

PERFORM 2100-PROCESS-UPDATE-RECORD
THRU 2199-EXIT.

1199-EXIT.
EXIT.

2000-LEVEL-2-ROUTINES SECTION.

2100-PROCESS-UPDATE-RECORD.

ADD 1 TO UPDATES-COUNT.

MOVE SPACES TO FIELD-UPDATE-FLAGS,
PRIOR-FIELDS.

```

IF ACTION-IS-ADD
  MOVE 'Add' TO WS-UPDATE-TYPE
ELSE
  IF ACTION-IS-CHANGE
    MOVE 'Change' TO WS-UPDATE-TYPE
  ELSE
    IF ACTION-IS-DELETE
      MOVE 'Delete' TO WS-UPDATE-TYPE
    ELSE
      MOVE 'Invalid' TO WS-UPDATE-TYPE
      MOVE 'Update code is not valid (A/C/D)'
        TO WS-STATUS-MESSAGE.

```

```

IF ACTION-IS-VALID
  MOVE UDR-CHANGE-FIELDS TO UPDATE-FIELDS
  PERFORM 2200-PROCESS-VALID-UPDATE

```

```

ELSE
  ADD 1 TO ERROR-COUNT
  INSPECT UPDATE-FIELDS
    REPLACING ALL LOW-VALUES BY SPACES
  MOVE UPDATE-FIELDS TO SI-MASTER-RECORD.

```

```

GENERATE UPDATE-DETAIL.

```

```

2200-PROCESS-VALID-UPDATE.

```

```

MOVE SI-STUDENT-NUMBER OF UPDATE-FIELDS
  TO SMR-STUDENT-NUMBER.
MOVE 'U' TO STUDENT-MASTER-EXISTS-SW.
READ STUDENT-MASTER-FILE
  INVALID KEY
    MOVE 'N' TO STUDENT-MASTER-EXISTS-SW.

```

```

IF STMASTU-STATUS = '00'

```

```

MOVE 'Y' TO STUDENT-MASTER-EXISTS-SW
MOVE STUDENT-MASTER-RECORD TO SI-MASTER-RECORD.

```

```

IF ACTION-IS-ADD
  MOVE 'Add' TO WS-UPDATE-TYPE
ELSE
  IF ACTION-IS-CHANGE
    MOVE 'Change' TO WS-UPDATE-TYPE
  ELSE
    IF ACTION-IS-DELETE
      MOVE 'Delete' TO WS-UPDATE-TYPE
    ELSE
      MOVE 'Invalid' TO WS-UPDATE-TYPE
      MOVE 'Update code is not valid (A/C/D)'
        TO WS-STATUS-MESSAGE.

```

```

IF ACTION-IS-VALID
  MOVE UDR-CHANGE-FIELDS TO UPDATE-FIELDS
  PERFORM 2200-PROCESS-VALID-UPDATE

```

```

THRU 2299-EXIT

```

```

ELSE
  ADD 1 TO ERROR-COUNT
  EXAMINE UPDATE-FIELDS
    REPLACING ALL LOW-VALUES BY SPACES
  MOVE UPDATE-FIELDS TO STUDENT-MASTER-RECORD.

```

```

GENERATE UPDATE-DETAIL.

```

```

2199-EXIT.
EXIT.

```

```

2200-PROCESS-VALID-UPDATE.

```

```

MOVE SI-STUDENT-NUMBER OF UPDATE-FIELDS
  TO SI-STUDENT-NUMBER OF STUDENT-MASTER-RECORD.
MOVE 'U' TO STUDENT-MASTER-EXISTS-SW.

```

```

MOVE VSIO-READ TO VSIO-COMMAND.
CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
  STUDENT-MASTER-RECORD.

```

```

IF VSIO-SUCCESS
  MOVE 'Y' TO STUDENT-MASTER-EXISTS-SW

```

```

ELSE
  IF VSIO-RECORD-NOT-FOUND
    MOVE 'N' TO STUDENT-MASTER-EXISTS-SW

```

```

ELSE
  DISPLAY 'VSAMIO ERROR OCCURRED DURING '
    VSIO-COMMAND

```

EXHIBIT NAMED VSIO-RETURN-CODE, EXHIBIT NAMED VSIO-VSAM-RETURN-CODE, VSIO-VSAM-FUNCTION-CODE, VSIO-VSAM-FEEDBACK-CODE	
MOVE +12 TO RETURN-CODE	
STOP RUN.	

IF STUDENT-MASTER-NOT-EXISTS

MOVE SPACES TO SI-MASTER-RECORD.

IF STUDENT-MASTER-NOT-EXISTS

MOVE SPACES TO STUDENT-MASTER-RECORD.

IF ACTION-IS-ADD

PERFORM 3100-PROCESS-ADD

IF ACTION-IS-ADD

PERFORM 3100-PROCESS-ADD

THRU 3199-EXIT

ELSE

IF ACTION-IS-CHANGE

PERFORM 3200-PROCESS-CHANGE

ELSE

IF ACTION-IS-CHANGE

PERFORM 3200-PROCESS-CHANGE

THRU 3299-EXIT

ELSE

IF ACTION-IS-DELETE

PERFORM 3300-PROCESS-DELETE.

ELSE

IF ACTION-IS-DELETE

PERFORM 3300-PROCESS-DELETE

THRU 3399-EXIT.

2299-EXIT.

EXIT.

3000-LEVEL-3-ROUTINES SECTION.

3000-LEVEL-3-ROUTINES SECTION.

3100-PROCESS-ADD.

3100-PROCESS-ADD.

IF STUDENT-MASTER-EXISTS

MOVE 'Attempted add for existing ID'
TO WS-STATUS-MESSAGE

MOVE SI-MASTER-RECORD TO PRIOR-FIELDS

INSPECT UPDATE-FIELDS

REPLACING ALL LOW-VALUES BY SPACE

MOVE UPDATE-FIELDS TO SI-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4100-PROCESS-VALID-ADD.

IF STUDENT-MASTER-EXISTS

MOVE 'Attempted add for existing ID'
TO WS-STATUS-MESSAGE

MOVE STUDENT-MASTER-RECORD TO PRIOR-FIELDS

EXAMINE UPDATE-FIELDS

REPLACING ALL LOW-VALUES BY SPACE

MOVE UPDATE-FIELDS TO STUDENT-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4100-PROCESS-VALID-ADD

THRU 4199-EXIT.

3199-EXIT.

EXIT.

3200-PROCESS-CHANGE.

3200-PROCESS-CHANGE.

MOVE SI-MASTER-RECORD TO PRIOR-FIELDS.

MOVE STUDENT-MASTER-RECORD TO PRIOR-FIELDS.

IF STUDENT-MASTER-NOT-EXISTS

IF STUDENT-MASTER-NOT-EXISTS

updt01n - updt01v

MOVE 'Master record not found for ID'
TO WS-STATUS-MESSAGE

INSPECT UPDATE-FIELDS

REPLACING ALL LOW-VALUES BY SPACE

MOVE UPDATE-FIELDS TO SI-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4200-PROCESS-VALID-CHANGE.

MOVE 'Master record not found for ID'
TO WS-STATUS-MESSAGE

EXAMINE UPDATE-FIELDS

REPLACING ALL LOW-VALUES BY SPACE

MOVE UPDATE-FIELDS TO STUDENT-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4200-PROCESS-VALID-CHANGE
THRU 4299-EXIT.

3299-EXIT.

EXIT.

3300-PROCESS-DELETE.

IF STUDENT-MASTER-NOT-EXISTS

MOVE 'Master record not found for ID'
TO WS-STATUS-MESSAGE

MOVE SPACES TO SI-MASTER-RECORD

MOVE SI-STUDENT-NUMBER OF UPDATE-FIELDS

TO SI-STUDENT-NUMBER OF SI-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4300-PROCESS-VALID-DELETE.

3300-PROCESS-DELETE.

IF STUDENT-MASTER-NOT-EXISTS

MOVE 'Master record not found for ID'
TO WS-STATUS-MESSAGE

MOVE SPACES TO STUDENT-MASTER-RECORD

MOVE SI-STUDENT-NUMBER OF UPDATE-FIELDS

TO SI-STUDENT-NUMBER OF STUDENT-MASTER-RECORD

ADD 1 TO ERROR-COUNT

ELSE

PERFORM 4300-PROCESS-VALID-DELETE
THRU 4399-EXIT.

3399-EXIT.

EXIT.

4000-LEVEL-4-ROUTINES SECTION.

4000-LEVEL-4-ROUTINES SECTION.

4100-PROCESS-VALID-ADD.

4100-PROCESS-VALID-ADD.

MOVE UPDATE-FIELDS TO SI-MASTER-RECORD.

PERFORM 5100-BUILD-SORT-NAME.

MOVE UPDATE-FIELDS TO STUDENT-MASTER-RECORD.

PERFORM 5100-BUILD-SORT-NAME

THRU 5199-EXIT.

MOVE VSIO-WRITE TO VSIO-COMMAND.

CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
STUDENT-MASTER-RECORD.

WRITE STUDENT-MASTER-RECORD FROM SI-MASTER-RECORD

INVALID KEY

MOVE 'Invalid key on record write '

IF VSIO-SUCCESS

ADD 1 TO ADDITIONS-COUNT

MOVE 'Record added successfully'

TO WS-STATUS-MESSAGE

ELSE

IF VSIO-NO-MORE-SPACE

ADD 1 TO ERROR-COUNT

MOVE 'No more space in cluster'

TO WS-STATUS-MESSAGE ADD 1 TO ERROR-COUNT.	TO WS-STATUS-MESSAGE ELSE DISPLAY 'VSAMIO ERROR OCCURRED DURING ' VSIO-COMMAND EXHIBIT NAMED VSIO-RETURN-CODE, EXHIBIT NAMED VSIO-VSAM-RETURN-CODE, VSIO-VSAM-FUNCTION-CODE, VSIO-VSAM-FEEDBACK-CODE MOVE +12 TO RETURN-CODE STOP RUN.
IF STMASTU-STATUS = '00' ADD 1 TO ADDITIONS-COUNT. MOVE 'Record added successfully' TO WS-STATUS-MESSAGE.	4199-EXIT. EXIT.
4200-PROCESS-VALID-CHANGE. IF SI-FIRST-NAME OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-FIRST-NAME, FUF-SORT-NAME MOVE SI-FIRST-NAME OF UPDATE-FIELDS TO SI-FIRST-NAME OF SI-MASTER-RECORD. IF SI-MINITIAL OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-MINITIAL FUF-SORT-NAME MOVE SI-MINITIAL OF UPDATE-FIELDS TO SI-MINITIAL OF SI-MASTER-RECORD. IF SI-LAST-NAME OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-LAST-NAME FUF-SORT-NAME MOVE SI-LAST-NAME OF UPDATE-FIELDS TO SI-LAST-NAME OF SI-MASTER-RECORD. IF SI-STREET OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-STREET MOVE SI-STREET OF UPDATE-FIELDS TO SI-STREET OF SI-MASTER-RECORD. IF SI-CITY OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-CITY MOVE SI-CITY OF UPDATE-FIELDS TO SI-CITY OF SI-MASTER-RECORD. IF SI-STATE OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-STATE MOVE SI-STATE OF UPDATE-FIELDS	4200-PROCESS-VALID-CHANGE. IF SI-FIRST-NAME OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-FIRST-NAME, FUF-SORT-NAME MOVE SI-FIRST-NAME OF UPDATE-FIELDS TO SI-FIRST-NAME OF STUDENT-MASTER-RECORD. IF SI-MINITIAL OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-MINITIAL FUF-SORT-NAME MOVE SI-MINITIAL OF UPDATE-FIELDS TO SI-MINITIAL OF STUDENT-MASTER-RECORD. IF SI-LAST-NAME OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-LAST-NAME FUF-SORT-NAME MOVE SI-LAST-NAME OF UPDATE-FIELDS TO SI-LAST-NAME OF STUDENT-MASTER-RECORD. IF SI-STREET OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-STREET MOVE SI-STREET OF UPDATE-FIELDS TO SI-STREET OF STUDENT-MASTER-RECORD. IF SI-CITY OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-CITY MOVE SI-CITY OF UPDATE-FIELDS TO SI-CITY OF STUDENT-MASTER-RECORD. IF SI-STATE OF UPDATE-FIELDS NOT = LOW-VALUES MOVE '>' TO FUF-STATE MOVE SI-STATE OF UPDATE-FIELDS

TO SI-STATE OF SI-MASTER-RECORD.

IF SI-ZIPCODE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-ZIPCODE
 MOVE SI-ZIPCODE OF UPDATE-FIELDS
 TO SI-ZIPCODE OF SI-MASTER-RECORD.

IF SI-BIRTH-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-BIRTH-DATE
 MOVE SI-BIRTH-DATE OF UPDATE-FIELDS
 TO SI-BIRTH-DATE OF SI-MASTER-RECORD.

IF SI-ENROLL-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-ENROLL-DATE
 MOVE SI-ENROLL-DATE OF UPDATE-FIELDS
 TO SI-ENROLL-DATE OF SI-MASTER-RECORD.

IF SI-CONTACT-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-CONTACT-DATE
 MOVE SI-CONTACT-DATE OF UPDATE-FIELDS
 TO SI-CONTACT-DATE OF SI-MASTER-RECORD.

IF SI-GENDER OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-GENDER
 MOVE SI-GENDER OF UPDATE-FIELDS
 TO SI-GENDER OF SI-MASTER-RECORD.

IF FUF-FIRST-NAME = '>'
 OR FUF-MINITIAL = '>'
 OR FUF-LAST-NAME = '>'
 MOVE '>' TO FUF-SORT-NAME
 PERFORM 5100-BUILD-SORT-NAME.

REWRITE STUDENT-MASTER-RECORD FROM SI-MASTER-RECORD
 INVALID KEY
 MOVE 'Invalid key on record rewrite'
 TO WS-STATUS-MESSAGE
 ADD 1 TO ERROR-COUNT.

IF STMASTU-STATUS = '00'
 ADD 1 TO CHANGES-COUNT.

MOVE 'Record changed successfully'
 TO WS-STATUS-MESSAGE.

TO SI-STATE OF STUDENT-MASTER-RECORD.

IF SI-ZIPCODE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-ZIPCODE
 MOVE SI-ZIPCODE OF UPDATE-FIELDS
 TO SI-ZIPCODE OF STUDENT-MASTER-RECORD.

IF SI-BIRTH-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-BIRTH-DATE
 MOVE SI-BIRTH-DATE OF UPDATE-FIELDS
 TO SI-BIRTH-DATE OF STUDENT-MASTER-RECORD.

IF SI-ENROLL-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-ENROLL-DATE
 MOVE SI-ENROLL-DATE OF UPDATE-FIELDS
 TO SI-ENROLL-DATE OF STUDENT-MASTER-RECORD.

IF SI-CONTACT-DATE OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-CONTACT-DATE
 MOVE SI-CONTACT-DATE OF UPDATE-FIELDS
 TO SI-CONTACT-DATE OF STUDENT-MASTER-RECORD.

IF SI-GENDER OF UPDATE-FIELDS NOT = LOW-VALUES
 MOVE '>' TO FUF-GENDER
 MOVE SI-GENDER OF UPDATE-FIELDS
 TO SI-GENDER OF STUDENT-MASTER-RECORD.

IF FUF-FIRST-NAME = '>'
 OR FUF-MINITIAL = '>'
 OR FUF-LAST-NAME = '>'
 MOVE '>' TO FUF-SORT-NAME
 PERFORM 5100-BUILD-SORT-NAME
 THRU 5199-EXIT.

MOVE VSIO-REWRITE TO VSIO-COMMAND.
 CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
 STUDENT-MASTER-RECORD.

IF VSIO-SUCCESS
 ADD 1 TO CHANGES-COUNT
 MOVE 'Record changed successfully'
 TO WS-STATUS-MESSAGE

ELSE
 DISPLAY 'VSAMIO ERROR OCCURRED DURING '
 VSIO-COMMAND

updt01n - updt01v

4300-PROCESS-VALID-DELETE.

MOVE SPACES TO UPDATE-FIELDS.

```
DELETE STUDENT-MASTER-FILE RECORD
  INVALID KEY
    MOVE 'Invalid key on record delete'
      TO WS-STATUS-MESSAGE
    ADD 1 TO ERROR-COUNT.
```

```
IF STMASTU-STATUS = '00'
  ADD 1 TO DELETIONS-COUNT.
  MOVE 'Record deleted successfully'
    TO WS-STATUS-MESSAGE
```

```
MOVE SI-MASTER-RECORD TO PRIOR-FIELDS
MOVE SPACES TO SI-MASTER-RECORD.
```

5000-LEVEL-5-ROUTINES SECTION.

5100-BUILD-SORT-NAME.

```
MOVE SPACES TO WS-SORT-NAME.
MOVE SI-LAST-NAME OF SI-MASTER-RECORD TO WS-SOURCE.
SET WSS-IX, WSSN-IX TO 1.
PERFORM 6100-MOVE-CHARACTER
  UNTIL WSS-CH (WSS-IX) = SPACE
    OR WSS-IX > 10.
```

```
EXHIBIT NAMED VSIO-RETURN-CODE,
EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
          VSIO-VSAM-FUNCTION-CODE,
          VSIO-VSAM-FEEDBACK-CODE

MOVE +12 TO RETURN-CODE
STOP RUN.
```

```
4299-EXIT.
EXIT.
```

4300-PROCESS-VALID-DELETE.

MOVE SPACES TO UPDATE-FIELDS.

```
MOVE VSIO-DELETE TO VSIO-COMMAND.
CALL 'VSAMIO' USING VSIO-PARAMETER-BLOCK, KSDSF01,
  STUDENT-MASTER-RECORD.
```

```
IF VSIO-SUCCESS
  ADD 1 TO DELETIONS-COUNT
```

```
MOVE 'Record deleted successfully'
  TO WS-STATUS-MESSAGE
```

```
MOVE STUDENT-MASTER-RECORD TO PRIOR-FIELDS
MOVE SPACES TO STUDENT-MASTER-RECORD
```

```
ELSE
  DISPLAY 'VSAMIO ERROR OCCURRED DURING '
    VSIO-COMMAND
  EXHIBIT NAMED VSIO-RETURN-CODE,
  EXHIBIT NAMED VSIO-VSAM-RETURN-CODE,
          VSIO-VSAM-FUNCTION-CODE,
          VSIO-VSAM-FEEDBACK-CODE

  MOVE +12 TO RETURN-CODE
  STOP RUN.
```

```
4399-EXIT.
EXIT.
```

5000-LEVEL-5-ROUTINES SECTION.

5100-BUILD-SORT-NAME.

```
MOVE SPACES TO WS-SORT-NAME.
MOVE SI-LAST-NAME OF STUDENT-MASTER-RECORD TO WS-SOURCE.
SET WSS-IX, WSSN-IX TO 1.
PERFORM 6100-MOVE-CHARACTER
  UNTIL WSS-CH (WSS-IX) = SPACE
    OR WSS-IX > 10.
```

MOVE SI-FIRST-NAME OF SI-MASTER-RECORD TO WS-SOURCE.

SET WSS-IX TO 1.

PERFORM 6100-MOVE-CHARACTER

UNTIL WSS-CH (WSS-IX) = SPACE

OR WSS-IX > 11.

MOVE SI-MINIMAL OF SI-MASTER-RECORD TO WSSN-CH (WSSN-IX).

MOVE WS-SORT-NAME TO SI-SORT-NAME OF SI-MASTER-RECORD.

MOVE SI-FIRST-NAME OF STUDENT-MASTER-RECORD TO WS-SOURCE.

SET WSS-IX TO 1.

PERFORM 6100-MOVE-CHARACTER

UNTIL WSS-CH (WSS-IX) = SPACE

OR WSS-IX > 11.

MOVE SI-MINIMAL OF STUDENT-MASTER-RECORD

TO WSSN-CH (WSSN-IX).

MOVE WS-SORT-NAME

TO SI-SORT-NAME OF STUDENT-MASTER-RECORD.

5199-EXIT.

EXIT.

6000-LEVEL-6-ROUTINES SECTION.

6100-MOVE-CHARACTER.

MOVE WSS-CH (WSS-IX) TO WSSN-CH (WSSN-IX).

SET WSS-IX, WSSN-IX UP BY 1.

6000-LEVEL-6-ROUTINES SECTION.

6100-MOVE-CHARACTER.

MOVE WSS-CH (WSS-IX) TO WSSN-CH (WSSN-IX).

SET WSS-IX, WSSN-IX UP BY 1.