Práctica 10 - Academia Cobol 2023

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Código Fuente

```
*_____;
IDENTIFICATION DIVISION.
*_____*
PROGRAM-ID<u>.</u> CBLDB21
AUTHOR. Victor Lavalle.
              "Practice 10"
* Instructions: Practice UPDATES and COMMITS
*_____*
ENVIRONMENT DIVISION.
CONFIGURATION SECTION.
INPUT-OUTPUT SECTION.
FILE-CONTROL.
  SELECT REPOUT
       ASSIGN TO UT-S-REPORT.
DATA DIVISION.
*_____*
FILE SECTION.
FD REPOUT
     RECORD CONTAINS 30 CHARACTERS
     LABEL RECORDS ARE OMITTED
     DATA RECORD IS REPREC.
01 REPREC.
  05 ACCT-ID-0
                    PIC X(08).
  05 FILLER
                    PIC X(07) VALUE SPACES.
  05 ACCT-NAME-0
                    PIC X(15).
```

```
WORKING-STORAGE SECTION.
01 FLAGS.
  05 BANDERA-CURSOR PIC X VALUE SPACE.
    88 FIN-CURSOR
                            VALUE 'Y'.
    88 NO-FIN-CURSOR
                           VALUE 'N'.
************
     EXEC SQL INCLUDE SQLCA END-EXEC.
****************
01 UD-ERROR-MESSAGE PIC X(80) VALUE SPACES.
01 SQLCODES.
  05 SQLCODE0
                     PIC S9(9) COMP-5
                            VALUE 0.
  05 SQLCODE100 PIC S9(9) COMP-5
                            VALUE 100.
***********
* DECLARACION SQL DE LA TABLA
************
      EXEC SQL DECLARE Z94474T TABLE
             (ACCTNO CHAR(8) NOT NULL,
             LIMIT DECIMAL(9,2),
             BALANCE DECIMAL(9,2),
             SURNAME CHAR(20) NOT NULL,
             FIRSTN CHAR(15) NOT NULL,
             ADDRESS1 CHAR(25) NOT NULL,
             ADDRESS2 CHAR(20) NOT NULL,
             ADDRESS3 CHAR(15) NOT NULL,
             RESERVED CHAR(7) NOT NULL,
             COMMENTS CHAR(50) NOT NULL)
      END-EXEC.
************
* SQL CURSORS
*************
       EXEC SQL DECLARE CURTABLE CURSOR WITH HOLD FOR
             SELECT ACCTNO, FIRSTN
             FROM Z94474T
             ORDER BY ACCTNO ASC
       END-EXEC.
*************
* VARIABLES HOST EN DONDE RECIBIMOS LA TABLA
01 VARIABLES-HOST.
  02 ACCT-ID
                     PIC X(08).
  02 ACCT-NAME
                    PIC X(15).
01 VARIABLES.
  05 WSV-PARG-NAME
                     PIC X(17).
  05 WSV-TEMP-NAME
                     PIC X(12).
  05 WSV-TEMP-ACCTNO
                     PIC X(08).
```

```
01 COUNTERS.
  05 WSV-COUNT-REC
                            PIC 9(01) VALUE 0.
  05 WSC-COUNT-LIMIT
                            PIC 9(01) VALUE 9.
01 NAME-RECORDS.
  05 WSC-NAME-ASAEL
                            PIC X(06) VALUE 'Asael'.
  05 WSC-NAME-DIANA
                            PIC X(12) VALUE 'Diana Brenda'.
  05 WSC-NAME-JORGE
                            PIC X(05) VALUE 'Jorge'.
  05 WSC-NAME-ANDREA
                            PIC X(06) VALUE 'Andrea'.
  05 WSC-NAME-CARINA
                            PIC X(07) VALUE 'Carina'.
01 LOG-MESSAGES.
  05 WSV-LOG-MESSAGE
                            PIC X(80) VALUE SPACES.
  05 QMLOG-FD
                            PIC S9(4) BINARY
                                     VALUE 0.
  05 QMLOG-RECORD
                            PIC X(80) VALUE SPACES.
01 PARAGPH-NAMES.
                         PIC X(13) VALUE 'ABRIR CURSOR'.
PIC X(11) VALUE 'LEEP CURSOR'.
  05 WSC-OPEN-CUR
  05 WSC-READ-CUR
  05 WSC-CLOSE-CUR
                            PIC X(13) VALUE 'CERRAR CURSOR'.
  05 WSC-EVAL-CODE
                           PIC X(17) VALUE
         'EVALUATE SQLCODES'.
  05 WSC-MAIN-PRO
                          PIC X(17) VALUE
        'PROCESO PRINCIPAL'.
  05 WSC-UPDATE-NAME PIC X(11) VALUE
        'UPDATE-NAME'.
01 ERROR-MESSAGES.
  05 WSC-ERR-MSG-CUR PIC X(28) VALUE
        "Error en operacion de cursor".
  05 WSC-ERR-MSG-NOT-FOUND PIC X(22) VALUE
        "Registro no encontrado".
  05 WSC-ERR-MSG-EMPTY PIC X(16) VALUE
        "Registro vacio".
  05 WSC-ERR-MSG-PARG PIC X(16) VALUE
        "Error en parrafo"<u>.</u>
01 SUCCESS-MESSAGES.
  05 WSC-SUC-MSG-UPD
                          PIC X(21) VALUE
        "Actualizacion exitosa".
  05 WSC-SUC-MSG-DEL
                            PIC X(19) VALUE
```

```
"Eliminacion exitosa".
   05 WSC-SUC-MSG-INS
                          PIC X(17) VALUE
        "Insercion exitosa".
   05 WSC-SUC-MSG-COMMIT
                          PIC X(14) VALUE
        "Commit exitoso".
   05 WSC-SUC-MSG-ROLLBACK PIC X(16) VALUE
        "Rollback exitoso".
   05 WSC-SUC-MSG-READ
                          PIC X(15) VALUE
        "Lectura exitosa"<u>.</u>
   05 WSC-SUC-MSG-CUR
                          PIC X(27) VALUE
        "Operacion en cursor exitosa".
* Print format for the report
01 BREAKLINE.
   05 BLANK-SPACE PIC X(50) VALUE ALL " ".
01 HEADER-1.
                           PIC X(09) VALUE 'Realizo: '
   05 FILLER
   05 WSV-AUTHOR
                           PIC X(06).
01 HEADER-2.
   05 FILLER
                           PIC X(11) VALUE
        'Num. Cuenta'<u>.</u>
   05 FILLER
                           PIC X(04) VALUE SPACES.
   05 FILLER
                           PIC X(06) VALUE
        'Nombre'<u>.</u>
PROCEDURE DIVISION.
EMPIEZO-PROGRAMA.
    OPEN OUTPUT REPOUT.
    SET NO-FIN-CURSOR TO TRUE
    PERFORM PROCESO-PRINCIPAL.
FIN-PROGRAMA.
    CLOSE REPOUT.
    GOBACK.
PROCESO-PRINCIPAL.
    PERFORM ESCRIBE-ENCABEZADO
    PERFORM ABRO-CURSOR
```

```
PERFORM RESET-COUNTER
    PERFORM LOOP-DIANA UNTIL WSV-COUNT-REC = WSC-COUNT-LIMIT
    PERFORM RESET-COUNTER
    PERFORM LOOP-JORGE UNTIL WSV-COUNT-REC = WSC-COUNT-LIMIT
    PERFORM RESET-COUNTER
    PERFORM LOOP-ANDREA UNTIL WSV-COUNT-REC = WSC-COUNT-LIMIT
    PERFORM RESET-COUNTER
    PERFORM LOOP-CARINA UNTIL WSV-COUNT-REC = WSC-COUNT-LIMIT
    PERFORM RESET-COUNTER
    PERFORM CIERRO-CURSOR.
    PERFORM ABRO-CURSOR
    PERFORM LOOP-CURSOR UNTIL FIN-CURSOR
    PERFORM CIERRO-CURSOR.
  ***********
* Paragraphs to manipulate the cursors
LOOP-CURSOR.
    PERFORM ESCRIBE-REPORTE.
    PERFORM LEO-CURSOR.
ABRO-CURSOR ..
    EXEC SQL
         OPEN CURTABLE
         END-EXEC.
    MOVE WSC-OPEN-CUR TO WSV-PARG-NAME
    PERFORM QMLOG-OPEN-CURSOR.
LEO-CURSOR.
    EXEC SQL
         FETCH CURTABLE
         INTO: VARIABLES-HOST
         END-EXEC
    MOVE WSC-READ-CUR TO WSV-PARG-NAME
```

PERFORM LOOP-ASAEL UNTIL WSV-COUNT-REC = WSC-COUNT-LIMIT

```
CIERRO-CURSOR.
    EXEC SQL
        CLOSE CURTABLE
        END-EXEC.
    MOVE WSC-OPEN-CUR TO WSV-PARG-NAME
    PERFORM QMLOG-CLOSE-CURSOR.
 **********
* Paragraphs to hanlde the counter
 **************
SUM-COUNTER.
    ADD 1 TO WSV-COUNT-REC.
RESET-COUNTER.
    MOVE 0 TO WSV-COUNT-REC.
* Paragraphs to print out the report of the data *
ESCRIBO-AUTOR.
    MOVE 'Victor' TO WSV-AUTHOR.
    WRITE REPREC FROM HEADER-1.
ESCRIBE-REPORTE.
    INITIALIZE REPREC
    MOVE ACCT-NAME TO ACCT-NAME-0
    MOVE ACCT-ID TO ACCT-ID-0
    WRITE REPREC AFTER ADVANCING 1 LINES.
ESCRIBE-ENCABEZADO.
    PERFORM ESCRIBO-AUTOR
    WRITE REPREC FROM BREAKLINE AFTER ADVANCING 1 LINES
    WRITE REPREC FROM HEADER-2
    WRITE REPREC FROM BREAKLINE.
***********
* The EVALUATE-SQLCODES subroutine evaluates the *
* SQLCODE value and sets flags accordingly.
```

EVALUATE-SQLCODES.

```
EVALUATE SQLCODE
    WHEN SQLCODE0
         SET NO-FIN-CURSOR TO TRUE
    WHEN SQLCODE100
         SET FIN-CURSOR TO TRUE
         MOVE WSC-EVAL-CODE TO WSV-PARG-NAME
         DISPLAY WSC-ERR-MSG-EMPTY
                ' al ejecutar '
                WSV-PARG-NAME
                ' - SQLCODE: '
                SQLCODE
    WHEN OTHER
         PERFORM SQL-ROLLBACK
         DISPLAY WSC-SUC-MSG-ROLLBACK
                ' al ejecutar '
                WSV-PARG-NAME
                ' - SQLCODE: '
                SQLCODE
         STOP RUN
    END-EVALUATE.
 **************
* Root function that calls the other function below*
UPDATE-RECORDS.
    PERFORM LEO-CURSOR
    IF SQLCODE = SQLCODE0
       PERFORM UPDATE-NAME
       PERFORM SUM-COUNTER
    END-IF.
  ***********
* Update the state to New York to the best clients *
UPDATE-NAME.
    EXEC SQL
        UPDATE Z94474T
         SET FIRSTN = :WSV-TEMP-NAME
         WHERE ACCTNO = :ACCT-ID
    END-EXEC
    MOVE WSC-UPDATE-NAME TO WSV-PARG-NAME
    PERFORM QMLOG-UPDATE.
*Pargragphs to change the name to the temp variable*
```

```
UPDATE-NAME-ASAEL.
    MOVE WSC-NAME-ASAEL TO WSV-TEMP-NAME.
UPDATE-NAME-DIANA.
    MOVE WSC-NAME-DIANA TO WSV-TEMP-NAME.
UPDATE-NAME-JORGE.
    MOVE WSC-NAME-JORGE TO WSV-TEMP-NAME.
UPDATE-NAME-ANDREA.
    MOVE WSC-NAME-ANDREA TO WSV-TEMP-NAME.
UPDATE-NAME-CARINA.
    MOVE WSC-NAME-CARINA TO WSV-TEMP-NAME.
* Pargragphs to change he names every 9 records *
LOOP-ASAEL.
    PERFORM UPDATE-NAME-ASAEL
    PERFORM UPDATE-RECORDS
    PERFORM SQL-COMMIT.
LOOP-DIANA.
    PERFORM UPDATE-NAME-DIANA
    PERFORM UPDATE-RECORDS
    PERFORM SQL-COMMIT.
LOOP-JORGE.
    PERFORM UPDATE-NAME-JORGE
    PERFORM UPDATE-RECORDS
    PERFORM SQL-COMMIT.
LOOP-ANDREA.
    PERFORM UPDATE-NAME-ANDREA
    PERFORM UPDATE-RECORDS
    PERFORM SQL-COMMIT.
LOOP-CARINA.
    PERFORM UPDATE-NAME-CARINA
    PERFORM UPDATE-RECORDS
    PERFORM SQL-COMMIT.
```

```
* SQL-COMMIT procedure to commit the changes
SQL-COMMIT.
    EXEC SQL
        COMMIT
    END-EXEC .
************
* SQL-ROLLBACK procedure to restore data
SQL-ROLLBACK.
    EXEC SQL
        ROLLBACK
    END-EXEC .
* Functions to print a log of the program running *
QMLOG-ERROR.
    DISPLAY '*****************************.
    DISPLAY '* OOPS, ALGO SALIO MAL: *'
    DISPLAY '*' WSC-ERR-MSG-CUR ' EN ' WSV-PARG-NAME '*'
    DISPLAY '* SQLCODE: ' SQLCODE '
    DISPLAY '***********************************.<u>.</u>
QMLOG-READ-CURSOR ..
    EVALUATE SQLCODE
    WHEN SQLCODE0
        DISPLAY WSC-SUC-MSG-CUR ' en ' WSV-PARG-NAME
    WHEN OTHER
         PERFORM QMLOG-ERROR
        PERFORM EVALUATE-SQLCODES
    END-EVALUATE.
QMLOG-OPEN-CURSOR.
    EVALUATE SQLCODE
    WHEN SQLCODE0
         DISPLAY WSC-SUC-MSG-CUR ' en ' WSV-PARG-NAME
    WHEN OTHER
         PERFORM QMLOG-ERROR
         PERFORM EVALUATE-SQLCODES
    END-EVALUATE.
```

QMLOG-CLOSE-CURSOR.

```
EVALUATE SQLCODE
   WHEN SQLCODE0
        DISPLAY WSC-SUC-MSG-CUR ' en ' WSV-PARG-NAME
   WHEN OTHER
        PERFORM QMLOG-ERROR
        PERFORM EVALUATE-SQLCODES
    END-EVALUATE.
QMLOG-UPDATE.
   EVALUATE SQLCODE
   WHEN SQLCODE0
        DISPLAY WSC-SUC-MSG-UPD
                ' en '
                WSV-PARG-NAME
                ' - SQLCODE: '
                SQLCODE
   WHEN OTHER
        DISPLAY WSC-ERR-MSG-PARG ' ' WSV-PARG-NAME ' '
        PERFORM EVALUATE-SQLCODES
   END-EVALUATE.
```

Salida

© Z9447	4.CBL(CBLDB21).cbl	CBLDB21R.JOB09044.SYSOUT	CBLDB21R.JOB09044.REPORT X
	Realizo: Victo	_	3
1	Realizo: Victo	r	
2	Num Cuento	Nombro	
3	Num. Cuenta	Nombre	
4 5	20172021	Carina	
6	17891797	Asael	
7	17971801	Asael	
8	18011809	Asael	
9	18091817	Asael	
10	18171825	Asael	
11	18251829	Asael	
12	18291837	Asael	
13	18371841	Asael	
14	18411841	Asael	
15	18411845	Diana Brenda	
16	18451849	Diana Brenda	
17	18491850	Diana Brenda	
18	18501853	Diana Brenda	
19	18531857	Diana Brenda	
20	18571861	Diana Brenda	
21	18611865	Diana Brenda	
22	18651869	Diana Brenda	
23	18691877	Diana Brenda	
24	18771881	Jorge	
25	18811881	Jorge	
26	18811885	Jorge	
27	18851889	Jorge	
28	18891893	Jorge	
29	18931897	Jorge	
30	18971901	Jorge	
31	19011909	Jorge	
32	19091913	Jorge	
33	19131921	Andrea	
34	19211923	Andrea	
35	19231929	Andrea	
36	19291933 19331945	Andrea Andrea	
37 38	19331945	Andrea	
38	19531961	Andrea	
40	19611963	Andrea	
40	19631969	Andrea	
42	19691974	Carina	
43	19741977	Carina	
44	19771981	Carina	
45	19811989	Carina	
46	19891993	Carina	
47	19932001	Carina	
48	20012009	Carina	
49	20092017	Carina	
50	20172021	Carina	
51			

```
CBLDB21R.JOB09044.REPO
                 CBLDB21R.JOB09044.SYSOUT X
uperacion en cursor exitosa en LEEK LUKSUK
Operacion en cursor exitosa en LEER CURSOR
         OOPS, ALGO SALIO MAL:
*Error en operacion de cursor EN LEER CURSOR
* SOLCODE: 0000000100
***************
Registro vacio al ejecutar EVALUATE SQLCODES - SQLCODE:0000000100
```

Base de datos - TN3270





