

Práctica 7 - Academia Cobol 2023

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Código Fuente

```
* -----  
IDENTIFICATION DIVISION_  
* -----  
PROGRAM-ID_      CBLDB21  
AUTHOR_          Xideral_  
  
* _____ *  
* _____ *  
*               "Practice 7" _____ *  
* _____ *  
* Instructions: Handle errors with SQLCODES _____ *  
* _____ *  
  
* ----- *  
ENVIRONMENT DIVISION_  
* ----- *  
CONFIGURATION SECTION_  
INPUT-OUTPUT SECTION_  
FILE-CONTROL_  
    SELECT REPOUT  
        ASSIGN TO UT-S-REPORT_  
  
* ----- *  
DATA DIVISION_  
* ----- *  
FILE SECTION_  
FD  REPOUT  
    RECORD CONTAINS 69 CHARACTERS  
    LABEL RECORDS ARE OMITTED  
    DATA RECORD IS REPREC_  
  
01 REPREC_  
    05 ACCT-ID-0          PIC X(8)_  
    05 ACCT-LIMIT-0       PIC $$, $$$, $$9.99_  
    05 ACCT-BALANCE-0     PIC $$, $$$, $$9.99_
```

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 FOR SELECT * FROM Z94474T
    END-EXEC.

```

* HOST variables where we receive the table *

```

01 HOST-VARIABLES.
    02 ACCT-ID          PIC X(8).
    02 ACCT-LIMIT       PIC S9(7)V99 COMP-3.
    02 ACCT-BALANCE     PIC S9(7)V99 COMP-3.
    02 ACCT-APEP        PIC X(20).
    02 ACCT-NAME        PIC X(15).
    02 ACCT-DIRE1       PIC X(25).
    02 ACCT-DIRE2       PIC X(20).
    02 ACCT-DIRE3       PIC X(15).
    02 ACCT-RESER       PIC X(7).
    02 ACCT-COMMENT     PIC X(50).

```

*

* New variables to calculate the total amount of clients
 * from Chicago (CHI) and Virginia (VIR)

*

```

    02 WSV-COUNT-CHI     PIC S9(9)V99 COMP-3.
    02 WSV-COUNT-VIR     PIC S9(9)V99 COMP-3.
    02 WSV-SUM-MONEY     PIC S9(9)V99 COMP-3.

```

```

01 STATES.
    05 WSC-VIR-STATE     PIC X(10)          VALUE 'Virginia'.
    05 WSC-CHI-STATE     PIC X(10)          VALUE 'Chicago'.

```

PROCEDURE DIVISION.

* The program starts with a procedure division and *

```

* a main process named "START-PROGRAM".          *
*****
START-PROGRAM_
    OPEN OUTPUT REPOUT_
*     SET NO-END-CURSOR TO TRUE
    PERFORM MAIN-PROCESS_

*****
* The program ends with the END-PROGRAM process,  *
* which closes the REPOUT file and returns to the *
* calling program.                                *
*****

END-PROGRAM_
    CLOSE REPOUT_
    GOBACK_

*****
* The main process, named PROCESO-PRINCIPAL,      *
* calls four subroutines in order:                *
*                                                    *
* OPEN-CURSOR, READ-CURSOR, LOOP-CURSOR, and      *
* CLOSE-CURSOR.                                    *
*****

MAIN-PROCESS_

    PERFORM CALCULATE-TOTAL-MONEY
    PERFORM COUNT-CHI-CLIENTS
    PERFORM COUNT-VIR-CLIENTS

    PERFORM WRITE-REPORT_

*****
* The WRITE-REPORT subroutine moves data from      *
* several variables to other variables and writes *
* them to the REPOUT file.                        *
*****

WRITE-REPORT_
    MOVE ACCT-ID TO ACCT-ID-0
    MOVE ACCT-LIMIT TO ACCT-LIMIT-0
    MOVE ACCT-BALANCE TO ACCT-BALANCE-0
    MOVE ACCT-APEP TO ACCT-APEP-0
    MOVE ACCT-NAME TO ACCT-NAME-0

    MOVE WSV-SUM-MONEY TO TOTAL-MONEY
    MOVE WSV-COUNT-CHI TO TOTAL-CHI
    MOVE WSV-COUNT-VIR TO TOTAL-VIR

    WRITE REPREC FROM HEADER-1

```

```

WRITE REPREC FROM FOOTER-DATA-1
WRITE REPREC FROM FOOTER-DATA-2
WRITE REPREC FROM FOOTER-DATA-3
WRITE REPREC FROM FOOTER-LINES AFTER ADVANCING 1 LINE.

```

```

*****
* The EVALUO-SQLCODES subroutine evaluates the      *
* SQLCODE value and sets flags accordingly.          *
*****

```

EVALUATE-SQLCODES.

```

EVALUATE SQLCODE
WHEN SQLCODE0
    SET NO-END-CURSOR TO TRUE
    DISPLAY 'QUERY SUCCESS ' SQLCODE
WHEN SQLCODE100
    SET END-CURSOR TO TRUE
    DISPLAY 'REGISTER NOT FOUND ' SQLCODE
    STOP RUN
WHEN OTHER
    MOVE 'ERROR IN CURSOR' TO UD-ERROR-MESSAGE
    STOP RUN
END-EVALUATE.

```

```

*****
* The CALCULATE-TOTAL-MONEY subroutine performs the *
* sum of all the balance of all the registers and   *
* evaluate the SQLCODE value.                       *
*****

```

CALCULATE-TOTAL-MONEY.

```

EXEC SQL
    SELECT SUM(BALANCE)
    INTO :WSV-SUM-MONEY
    FROM Z94474T
END-EXEC

```

PERFORM EVALUATE-SQLCODES.

```

*****
* The COUNT-VIR-CLIENTS subroutine performs the     *
* sum of all the balance of all the registers and   *
* evaluate the SQLCODE value.                       *
*****

```

COUNT-VIR-CLIENTS.

```

EXEC SQL
    SELECT COUNT(*)
    INTO :WSV-COUNT-VIR

```

```
FROM Z94474T
WHERE ADDRESS3 = :WSC-VIR-STATE
END-EXEC
```

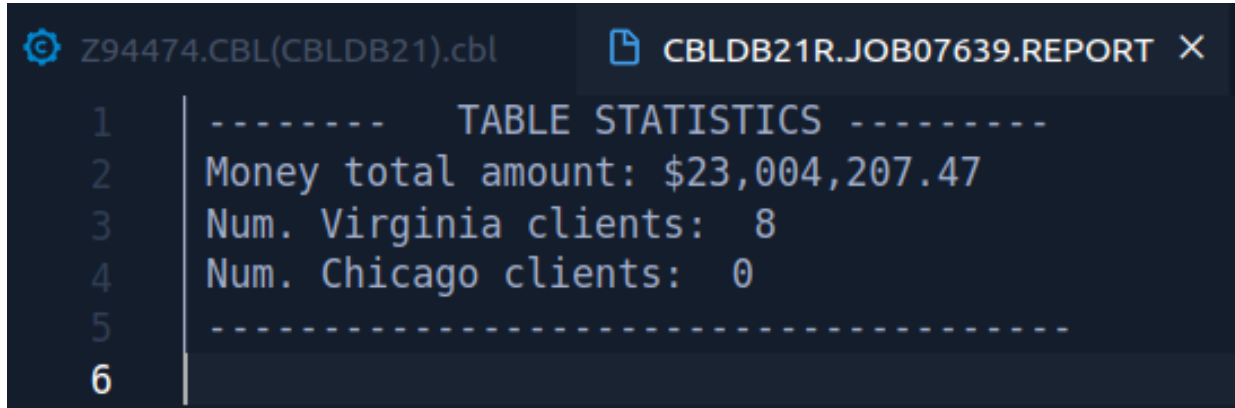
```
PERFORM EVALUATE-SQLCODES_.
```

```
*****
* The COUNT-VIR-CLIENTS subroutine performs the *
* sum of all the balance of all the registers and *
* evaluate the SQLCODE value. *
*****
```

```
COUNT-CHI-CLIENTS_
EXEC SQL
  SELECT COUNT(*)
  INTO :WSV-COUNT-VIR
  FROM Z94474T
  WHERE ADDRESS3 = :WSC-CHI-STATE
END-EXEC
```

```
PERFORM EVALUATE-SQLCODES_.
```

Salida



```
1  -----  TABLE STATISTICS  -----
2  Money total amount: $23,004,207.47
3  Num. Virginia clients:  8
4  Num. Chicago clients:  0
5  -----
6
```

