COBOL Exercises

Use the EMP.DATA dataset provided with the following structure for input IN program1 and program2

EMPID N 4

NAME A 15

SALARY N 6

DATE OF BIRTH N 8 (YYYYMMDD)

GENDER A 1 ( M for Male , F for Female)

DEPARTMENT NO N 2

(N: Numeric, A: Alphabetic)

Program 1

Write a program to generate employee report in the following format (one record shown as sample)

EMPLOYEE REPORT

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EMP ID NAME SALARY DEPARTMENT

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1234 Mr Kishore 67000 01

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Hint: Define all the layouts (headers and output records) in WORKING-STORAGE SECTION. Move them as required to output record buffer and write (You can use WRITE record FROM format)

Note:

1. Title of the employee (Mr or Ms) to be prefixed to the name (Use PIC XX field before name and move ‘Mr’ or ‘Ms’ and use IF statement to check GENDER value)
2. Report should be in the ascending order of salary ( Let the JCL have 2 steps. First step use SORT utility to sort the dataset on SALARY. Second step will be your program which uses output of SORT as INPUT using referback concept)
3. Suppress leading zeroes in SALARY (Use PIC ZZZZZZ)

Program 2

Write a program to display (SYSOUT=\* in JCL) total salary of each department (There are only 4 departments in the data)

Total salary of Department 1: XXXXXXXX

Total salary of Department 2: XXXXXXXX

Total salary of Department 3: XXXXXXXX

Total salary of Department 4: XXXXXXXX

Hint: Define 4 datanames in WORKING-STORAGE SECTION (TOTAL1, TOTAL2, TOTAL3, TOTAL4 with PIC 9(8) VALUE ZERO)

For each record, add salary to corresponding total by checking the department number(You need to write 4 IF statements. You can use EVALUATE also)

Define OUTPUT as below

01 OUT-DATA.

02 FILLER PIC X(28) VALUE “Total salary of Department” .

02 DEPTID PIC 99.

02 DEPTTOTAL PIC Z(9).

Move department number and corresponding total to this record and display (You may have to repeat four times with values 1,2,3,4)

Program 3

In this program you will create INPUT dataset with the following format to store ACCOUT details of customers

ACCOUNT NUMBER N 6

NAME A 15

ACCOUNT TYPE A 1 (S for Savings account, C for Current account)

BALANCE N 8

Enter the following data in the dataset (Data contains errors)

123456KISHORE KUMAR C00005600

134567ATUL JAIN X00004357

234567SREE KUMAR S00000500

387651RAMANA REDDY C00000200

456789SRIDEVI S00001256

23456ANIL DEVRAJ C00021111

Write a program to validate the records with the following conditions

ACCOUNT TYPE should be either C or S

For Savings account, minimum balance should be 1000

For Current account minimum balance should be 5000

Process:

Read record and check for errors. If record has errors, write it to ERROR.ACCOUNTS dataset

If the record does not have errors, write it to VALID.ACCOUNTS dataset

Note:

* If you want, you can add more records to input dataset with some errors
* Your program has one INPUT data set and TWO output data sets
* Output data sets can be allocated using IEFBR14 and the next STEP will be your program in which you can use these datasets using refer back concept (DSN=\*.STEPNAME.DDNAME)
* As additional practice, you can also try creating IEFBR14 step in a procedure with symbolic parameter for DSN and call it twice in your JCL