ASSESMENT02(JCL & VSAM)

Instruction:

1.If you are using TLAB\*\* ,Sample compile and run JCL is available in “TLABADM.LAB.SYS.COMPRUN”. Please gop in view mode and copy the members to your deliverable dataset.

2.If you are using TLAB\*\* the IP address is 10.142.149.210 and the Port is 623 to connect to Mainframe Terminal.

**Please do not EVALUATE and just SUBMIT the code for Evaluation – CC/MOCK/ICT assessments.**

**Activity 1: Using ISPF**

Allocate a PS dataset with record length 80 with naming convention as given below.

PS1 - <USERID>. JCLASSMT02.SHARE.PS1

Enter the records given below in the PS dataset PS1= <USERID>.JCL.ASSMT02.SHARE.PS1

* 1st row contains the header details, which have to be entered in PS1 file
* DO NOT ENTER ROW2 as it contains layout details.
* Insert one space(filler) between each field.
* Enter all the records in capital letters.

|  |  |  |  |
| --- | --- | --- | --- |
| **SHARE\_ID** | **NO\_OF\_SHARES** | **COMPANY\_NAME** | **SHARE\_PRICE** |
| **X(5)** | **9(3)** | **X(20)** | **9(3).9(2)** |
| SH010 | 020 | ABC INFO TECH | 129.25 |
| SH090 | 025 | APPLE INFO | 156.90 |
| SH020 | 050 | ORANGE INFO SYSTEMS | 100.00 |
| SH02@ | 056 | SQUARE SYSTEMS | 132.37 |
| SH011 | 034 | CUBE TECHNOLOGIES | 145.89 |
| SH019 | 045 | ECHO SYSTEMS | 111.11 |
| SH01# | 035 | MATRIX SOLUTIONS | 123.23 |
| SH022 | 020 | X SYSTEM SOLUTIONS | 145.35 |
| SH036 | 035 | I CLOUD SOLUTIONS | 111.25 |
| SH045 | 010 | TNT SYSTEMS | 154.45 |

**Activity 2: SORT USING JCL**

* Allocate a PDS <USERID>.JCLASSMT02.SHARE using ISPF and create a member JCL01 and write a JCL to perform the given task.
* Create an instream procedure for deleting and allocating the PS output datasets
* Name the instream proc as DSCRT which contains STEP001 & step002.

**STEP001:**

* This step should be PRE DELETE of output datasets – PS2,PS3,PS4,PS5,PS6.
* Declare the value for DSN as symbolic parameter &DSNAME
* Value for &DSNAME should be USERID.JCL.ASSMT02.SHARE.

**Example :** DSN=&DSNNAME PS2

**STEP002:**

* This step should be allocation of output datasets – PS2,PS3,PS4,PS5,PS6
* Declare the value for DSN as symbolic parameter &DSNAME
* Value for &DSNAME should be USERID.JCL.ASSMT02.SHARE

**Example:** DSN=&DSNNAME PS2

**STEP003:**

* This step should call the instream procedure DSCRT which will perform deletion and allocation of above mentioned PS datasets.

**STEP010:**

* Using Sort utility perform the given operations on PS1 <USERID>.JCL.ASSMT02.SHARE.PS1 and store the output in PS2

<USERID>.JCL.ASSMT02.SHARE.PS2

1. Sort records in ascending order based on SHARE\_ID and

NO\_OF\_SHARES and remove the header record.

1. Remove the records which have SHARE\_ID that has characters (@#)

**STEP020:**

* Using Sort utility perform the given operations on PS2

<USERID>.JCL.ASSMT02.SHARE.PS2 and store the output in PS3

<USERID>.JCL.ASSMT02.SHARE.PS3

* Extract 6 records from 2nd record into output file. If file contains 8 reocrds after sorting, this step should extract 2nd to 7th record.

**STEP030:**

* Using sort utility perform the given operations on PS2

<USERID>.JCL.ASSMT02.SHARE.PS2 and store the output in PS4

<USERID>.JCL.ASSMT02.SHARE.PS4

* Rearrange the position of the fields as specified in the below layout. The output of the sorted records should be stored into the PS4 file.

|  |  |  |  |
| --- | --- | --- | --- |
| **COMPANY\_NAME** | **SHARE\_PRICE** | **SHARE\_ID** | **NO\_OF\_SHARES** |

**STEP040:**

* Using sort utility, perform the given operations PS2
* <USERID>.JCL.ASSMT02.SHARE.PS2 and store the output in PS5

<USERID>.JCL.ASSMT02.SHARE.PS5

* Copy the records
* Insert the header in the output file PS5 in the 12th position as below.

|  |
| --- |
| \*\*\*SHARE DETAILS\*\*\* |
| Date: dd/mm/yyyy |
| Records |
| TOTAL NUMBER OF SHARES: 0250 |

Insert a trailer in the output file PS5 in the 2nd position with the Total number of shares.

For example, if the PS5 file has a total number of shares of 250, then the trailer record should be as below, starting from position 2, so TOTAL NUMBER OF SHARES: 0250

**STEP050:**

* Using sort utility, perform the given operations on PS2

<USERID>.JCL.ASSMT02.SHARE.PS2 and store the output in PS6

<USERID>.JCL.ASSMT02.SHARE.PS6

* Replace all the character ‘A’ in COMPANY\_NAME to ‘@’

For example, COMPANY\_NAME : ABC INFO TECH has to be replaced by @BC INFO TECH SQUARE SYSTEMS to SQU@RE SYSTEMS

**Activity 3 : VSAM**

* Write a procedure <USERID>.JCL.MYPROC(KSDSCRT) to allocate a KSDS dataset with the following specifications,

RECORDSIZE (80, 80)

KEYS – SHARE\_ID (X(5))

Name: KSDS = <USERID>.JCL.ASSMT02.SHARE.KSDS

Create a control card (MYCTL01) for the above procedure and store it in <USERID>.JCL.MYPROC.

**NOTE: IN THE CODE EDITOR DO NOT START CONTROL CARD STATEMENTS IN COLUMN 1**

Create a member JCL02 in the PDS <USERID>.JCL.ASSMT02.SHARE and write a JCL to perform the below mentioned task.

**STEP010:**

* Call the procedure KSDSCRT and allocate a dataset
* <USERID>.JCLASSMT02.SHARE.KSDS

**STEP020:**

* Check if the PS2 file is Empty or not.
* If not empty, in **STEP030** Load KSDS file with data from PS2. Else in **STEP040** display “Dataset is Empty” in the Spool.

**STEP050:**

* Write a JCL to create an Alternate Index <USERID>.JCL.ASSMT02.SHARE.AIX for KSDS(<USERID>.JCL.ASSMT02.SHARE.KSDS). The Alternate key is COMPANY\_NAME (X(20)).

**STEP060:**

* Define the BLDINDEX for the Alternate Index.

**STEP070:**

* Define the path. <USERID>.JCL.ASSMT02.SHARE.PATH

**Evaluation Procedure:**

* Make sure you have coded all the dataset name.proc name.control card name and step name as per the requirements mentioned.
* Download your input PS dataset from (JCL.ASSMT02.SHARE.PS1) to your system and name the file as SHAREINP.txt
* Download your procedure KSDSCRT to your system and name the file as KSDSCRT.txt
* Download your control card MYCTL01 to your system and name the file as MYCTL01.txt and make sure the CONTROL CARD STATEMENTS DOES NOT START IN COLUMN 1.
* Download your JCL CODE from <USERID>.JCL.ASSMT02 (JCL01,JCL02) to your system and name the file as JCL01.txt.JCL02.txt
* Drag the files (SHAREINP.txt,KSDSCRT.txt,MYCTL01.txt,JCL01.txt) into the code editor.
* Then press Evaluate button for Evaluation.