

Appendix
B

WORKSHOP

*Get on the
Fast Track!*



TM

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1 Procedures

Exercise 1

1. Code an in-stream procedure that will perform the following tasks.
 - 1.1. Use IEFBR14 to create a new dataset with the following characteristics:

| |
|----------------------------------------------------------------------------|
| Record Length: 80 |
| Record format: fixed |
| Block size determined by the operating system. |
| Primary space should be a symbolic variable with a default of 5. |
| Space units should be tracks. |
| Dataset name should have a symbolic variable for the high level qualifier. |

- 1.2. Use IEBGENER to populate the new dataset created in 1.1.
 - 1.2.1. Use a DD override to SYSUT1 to supply the data.
- 1.3. Use IEBGENER to print the dataset.
 - 1.3.1. Set the region of this step with an EXEC override.
- 1.4. Print all the members in the PDS that are being stored in the JCL.
 - 1.4.1. Use the IEBPTPCH utility.

Exercise 2

1. Code a job comprised of five steps:

| | |
|--------|------------------------------------------------------------------------------------------------------------------|
| Step 1 | Create a GDG Base using IDCAMS. The GDG will have a limit of 3 entries and will scratch the oldest entry. |
| Step 2 | Use the IEBGENER utility and copy the data into a new generation in the GDG. |
| Step 3 | Use IEBGENER to backup into another generation the dataset that has been created. |
| Step 4 | Use IEBGENER to backup into another generation the dataset created in the previous step. |
| Step 5 | Perform a LISTCAT of the GDG. |

Exercise 3

1. Code an in-stream catalog procedure to copy dataset _____ into a new dataset.
 - 1.1. The PROC should have a symbolic parameter for the high-level qualifier of the output dataset.
 - 1.2. Execute and test the PROC.
 - 1.3. Using a DD override, change the name of the output dataset.
 - 1.4. Execute and test the PROC.
2. Convert the in-stream procedure to a catalogue procedure.
3. Code and test JCL that invokes the utility - IEBTPCH and print the previous catalog procedure.

2 Specialized JCL Features

1. Define a GDG entry for uid.PRTOUTS with 3 entries.
 - 1.1. All the older entries should be automatically deleted.
2. Copy a file or in-stream data with a list of cars that will be bought this year into the next generation of uid.PRTOUTS.
 - 2.1. Run step 2 multiple times; there are five generations of uid.PRTOUTS.
3. In a new job, print the most recent and previous generation.

3 Additional JCL Topics

1. Code JCL which will compile and link a simple COBOL program.

The source for the program is:

```
ID DIVISION.  
PROGRAM-ID. SIMPLE.  
ENVIRONMENT DIVISION.  
CONFIGURATION SECTION.  
INPUT-OUTPUT SECTION.  
FILE-CONTROL.  
DATA DIVISION.  
WORKING-STORAGE SECTION.  
  
.  
PROCEDURE DIVISION.  
*  
000-MAINLINE.  
    DISPLAY 'START OF SIMPLE PROGRAM'  
    STOP RUN.
```

- 1.1. Override the DD SYSIN in the compile step. It should point to the source code above.
- 1.2. Override the COBOL PARM to include the option TEST.
- 1.3. Override the DD SYSLIB in the compile step to include an additional COPYLIB.

4 JES Control Statements

4.1 JES2

1. Code the JES2 control cards to specify two tape serial numbers to be used in a job.
2. Code a JES2 control card to specify that the job is to run on SY51.
3. Code a JES2 control card to specify the PROCLIB search library.
4. Code a JES2 control card to specify that the printout should be printed twice.
5. Code a JES2 control card to specify that the DD printout OUTDD is to be routed to a TEXAS printer.

4.2 JES3

1. Code a JES3 control card to specify that the job is to run on the SY51 processor.
2. Code a JES3 control card to specify that the DD OUTDD in STEP20 is to be printed twice.
3. Code a JES3 control card to specify that the DD OUTDD in STEP20 is to be printed ON 2 PART PAPER.

5 Running Jobs in Network

1. Code JES control cards to list the processors that the jobs are to be routed.
2. Send all output to the LOCAL printer.
3. Send a notification back to the userid when the remote job is completed.
4. Send a message to the operator.

6 Storage Management Subsystem

1. Allocate a QSAM dataset with the following characteristics:

```
DATASET NAME: uid.MYDATA.DATA
SPACE: 10 PRIMARY TRACKS, 5 SECONDARY TRACKS
DCB: RECORD LENGTH: 110
BLKSIZE: Allow the system to calculate
FORMAT: Fixed Block
STORAGE CLASS: _____ (provided by instructor)
MANAGEMENT CLASS: _____ (provided by instructor)
DATA CLASS: NONE
```

7 JCL Extensions

1. Code and test an in-stream catalog procedure with the following steps.

Step 1

- 1.1. Sort the database uid.BENEFIT.DATA on the Gender - column 78.
 - 1.1.1. The output dataset should use symbolic parameters for the number of tracks, high-level qualifier on the dataset name, and the LRECL.
 - 1.1.2. The input control card should be stored in a PDS and the SYSIN should reflect the control card dataset.
 - 1.1.3. Do not use in-stream data - SYSIN DD *.
 - 1.1.4. Use the SET statement to initialize the environmental variables.

Step 2

- 1.2. Only execute this step if the previous step, STEP 1, has a non-zero condition code.
 - 1.2.1. Use IEBGENER to print a message stating that the sort failed.
 - 1.2.2. The message should be stored in a PDS and SYSUT1 should reflect the dataset containing the error message.

Step 3

- 1.3. Only execute this step if the previous step, STEP 1, has a zero condition code.
 - 1.3.1. Use IEBGENER to print a message stating that the sort failed.
 - 1.3.2. The message should be stored in a PDS, and SYSUT1 should reflect the dataset containing the error message.
2. Store the PROC into a PROCLIB.
3. Code and test the catalog procedure.