**zOS Lab1 - Exercises for Chapter 4 - TSO/E, ISPF, and UNIX**

**ANSWER SHEET**

**Logging on to z/OS and entering TSO commands**

Establish a 3270 connection with z/OS using a workstation 3270 emulator and log on with your user ID (we call this *yourid*). From the TSO READY prompt (after you have keyed in =x to exit out of ISPF into native TSO), enter the following commands:

1. PROFILE

What is the prefix value? **Make a note of it**; it is your user ID on the system.

KC03CCA

2. PROFILE NOPREFIX

This changes your profile so TSO will not place a prefix at the beginning of your commands. Specifying PROFILE PREFIX(with a value) or NOPREFIX (by itself) tells the system whether to use a value (such as your user ID) to find files in the system. NOPREFIX tells the system not to bother limiting the results to files beginning with your user ID (for example), as it would otherwise do by default.

3. LISTC

The LISTCAT command (or LISTC, for short) lists the data sets in a particular catalog (we discuss catalogs in Chapter 5, “Working with data sets” on page 203). Your 3270 emulator has a PA1 (ESC) key. You can use the PA1 key to end the command output. When you see the three asterisks (\*\*\*), it indicates that your screen is filled. Press Enter to continue or PA1 to discontinue display.

Copy and paste the first few lines displayed by the LISTC command.

LISTING FROM CATALOG -- MASTERV.CATALO

CLUSTER ------- 00000000000000000000000000000000000000000000

DATA ------- MASTERV.CATALOG

INDEX ------ MASTERV.CATALOG.CATINDEX

NONVSAM ------- $$DRIVER.INFO

ALIAS --------- ADBB10

ALIAS --------- ADBB20

ALIAS --------- ADBC10

NONVSAM ------- ADCD.LIB.JCL

NONVSAM ------- ADCD.Z21Z.CLIST

4. PROFILE PREFIX(userid)

This command specifies that your user ID be prefixed to all non-fully-qualified

data set names. This will filter the results of the next command:

5. LISTC

What is displayed? Copy and paste the first few lines displayed by the LISTC command.

IN CATALOG:USERCAT.KCTR2

KC03CCA.DDIR

KC03CCA.DDIR.D

KC03CCA.DDIR.I

KC03CCA.ES1016.LIB

KC03CCA.ISPF.ISPPROF

KC03CCA.JCL

KC03CCA.LANG.CNTL

KC03CCA.LANG.LOAD

KC03CCA.LANG.OBJ

KC03CCA.LANG.SOURCE

KC03CCA.S0W1.ISPF.ISPPROF

6. ISPF (or ISPPDF)

Enter the ISPF menu-driven interface of TSO.

**Navigating through the ISPF menu options**

From the ISPF Primary Option Menu, perform the following steps:

1. Select Utilities, then select Dslist from the Utility Selection panel.

2. Enter SYS1 on the Dsname Level input field and press Enter.

What is displayed?

The data sets which match the name which is SYS1.

SYS1.AACBCNTL VDMVSB

SYS1.AADFMAC1 VDMVSB

SYS1.AADRLIB VDMVSB

SYS1.AADRYLIB VDMVSB

SYS1.AAXREXEC VDMVSB

SYS1.ABDTCLI0 VDMVSB

SYS1.ABDTHELP VDMVSB

SYS1.ABDTMAC VDMVSB

SYS1.ABDTMOD VDMVSB

SYS1.ABDTMSG VDMVSB

3. Use F8 to page down or forward, F7 to page up or backward, F10 to shift left, and F11 to shift right. Exit with F3.

4. Enter SYS1.PROCLIB on the Dsname Level input field and press Enter.

What is displayed?

It only displays one data set which name is SYS1.PROCLIB.

SYS1.PROCLIB VIMVSB

5. Enter v in the command column to the left of SYS1.PROCLIB. This is a partitioned data set with numerous members. Place an s to the left of any member to select the member for viewing.

Copy and paste the first few lines of member you selected.

VIEW SYS1.PROCLIB(AOPSTART) - 01.00 Columns 00001 00072

Command ===> Scroll ===> PAGE

\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Top of Data \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

==MSG> -Warning- The UNDO command is not available until you change

==MSG> your edit profile using the command RECOVERY ON.

000001 //\*-------------------------------------------------------------------

000002 //\*

000003 //\* AOPSTART - This procedure starts the Infoprint Server daemons.

000004 //\* The USERID assigned to this proc must be a member of

000005 //\* the AOPOPER group.

000006 //\*

000007 //\*-------------------------------------------------------------------

Now Press F1.

What specific help is provided?

It displays description of view and browse. And this tutorial provides 6 specific helps for us. Like, 0-General Introduction, 1-View entry panel, 2-SCLM View entry panel, 3-Ending a view session, 4-Using View, 5-Using Browse.

TUTORIAL -------------------------- VIEW ----------------------------- TUTORIAL

OPTION ===>

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| VIEW |

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View allows you to display source data or output listings. With View,

members of partitioned data sets, DASD-resident sequential data sets,

or z/OS UNIX files can be displayed, and updated using Edit primary

and line commands. Changes to data are not saved.

Browse also allows you to display data or output listings. With

Browse, members of partitioned data sets, DASD-resident sequential

data sets, or z/OS UNXI files can be displayed, and can be scrolled

forward, backward, left, or right. Browse can be selected from the

View Entry Panel.

The following topics are presented in sequence, or may be selected by number:

0 - General introduction 2 - SCLM View entry panel

1 - View entry panel 3 - Ending a view session

The following topics will be presented only if selected by number:

4 - Using View

5 - Using Browse

6. Enter =0 on the ISPF command or option line.

What is the first option listed in this ISPF Settings panel?

Command line at bottom

Change your settings to place the command line at the top of the panel. It is effective on exit from the Settings panel.

7. Enter PFSHOW OFF and then PFSHOW ON.

What is the difference? How is this useful?

PFSHOW OFF specifies that the function key area will not be displayed.

PFSHOW ON displays the long form of the function key area.

If the function key area has been displayed, we can easily to understand the function for each function key.

8. Exit back to the ISPF Primary Option Menu.

What value is used to select Utilities?

Using 3 to select Utilities

9. Select Utilities.

10.In the Utilities Selection panel,

what value is used to select Dslist?

Using 4 to select Dslist panel.

11. Exit back to the ISPF Primary Option Menu. On the option line, enter the Utilities selection value followed by a period, then enter the Dslist selection value.

What panel is displayed?

The Dslist panel will be displayed.

Data Set List Utility

Option ===>

blank Display data set list P Print data set list

V Display VTOC information PV Print VTOC information

Enter one or both of the parameters below:

Dsname Level . . .

Volume serial . .

Data set list options

Initial View Enter "/" to select option

1 1. Volume / Confirm Data Set Delete

2. Space / Confirm Member Delete

3. Attrib / Include Additional Qualifiers

4. Total / Display Catalog Name

Display Total Tracks

Prefix Dsname Level

12.Exit back to the ISPF Primary Option Menu. Place the cursor on the Status

entry at the top of the panel and press Enter. Select the Calendar value and

press Enter.

What changed?

The calendar has been displayed in the right side.

13.Now set your screen to the original configuration, using the Status drop-down

menu and selecting Session.

Copy and paste the Session information.

User ID . : KC03CCA

Time. . . : 19:54

Terminal. : 3278

Screen. . : 1

Language. : ENGLISH

Appl ID . : ISR

TSO logon : DBPROCCG

TSO prefix: KC03CCA

System ID : S0W1

MVS acct. : ACCT#

Release . : ISPF 7.3

**Using the ISPF editor**

From the ISPF Primary Option Menu, perform the following steps:

1. Go to the DSLIST Utility panel and enter *yourid****.***JCL in the Dsname Level field. Press Enter.

2. Place e (edit) to the left of *yourid****.***JCL. Place s (select) to the left of member EDITTEST. Enter PROFILE on the edit command line, and observe the data that is preceded by the profile and message lines. Read the profile settings and messages.

What is the value of the AUTOSAVE setting?

The value of the AUTOSAVE is ON.

Now enter RESET on the command line.

What is the result?

The message lines and profile lines are disappeared. It only show the content in the data set.

3. Enter any string of characters at the end of the first data line, then press Enter. On the command line, enter CAN (cancel). Press Enter to confirm the cancel request. Again, edit EDITTEST in the data set.

Were your changes saved?

No. It did not save this file. So, It still one line in this data set file.

4. Move the cursor to one of the top lines on your display. Press F2. The result is a second ISPF panel.

What occurs when F9 is entered repeatedly?

Clicking F9 will swap between ISPF Primary Option Menu and ISPF Editor page.

5. Using F9, switch to the ISPF Primary Option Menu, then press F1 to display the ISPF Tutorial panel.

6. From the ISPF Tutorial panel, select Edit, then Edit Line Commands, then Basic Commands. Press Enter to scroll through the basic commands tutorial. As you do so, frequently switch (F9) to the edit session and exercise the commands in EDITTEST. Repeat this same scenario for Move/Copy

commands and shifting commands.

Copy and paste the new contents of the EDITTEST member.

000001 TEST DATA

000002 THREE OF THE MOST COMMONLY USED LINE COMMANDS ARE I (INSERT

000003 THE FIVE LINE COMMANDS LISTED BELOW ARE USED TO SPECIFY EIT

000004 TWO KINDS OF SHIFTING ARE PROVIDED. COLUMN SHIFTING SHIFTS

000005 THE FIND, CHANGE AND EXCLUDE PRIMARY COMMANDS ARE USED TO F

**Tip:** As you become more familiar with ISPF, you learn the letters and numbers for some of the commonly used options. Preceding an option with the = key takes you directly to that option, bypassing the menus in between. You can also go directly to nested options with the = sign. For example,

=3.4 takes you directly to a commonly used data set utility menu.

7. From the ISPF Tutorial panel, select Edit, then Edit Primary Commands, then FIND/CHANGE/EXCLUDE commands. Press Enter to scroll through the FIND/CHANGE/EXCLUDE commands tutorial. As you do so, frequently switch (F9) to the edit session and exercise the commands in EDITTEST.

8. Enter =X on the ISPF help panel to end the second ISPF panel session. Save and exit the Edit Panel (F3) to return to the ISPF Primary Option Menu.

**Using SDSF**

From the ISPF Primary Option Menu, locate and select System Display and Search Facility (SDSF), which is a utility that lets you look at output data sets. On the Marist ISPF Primary Menu enter SD. From the SDSF Primary Menu Perform the following steps:

1. Enter LOG, then shift left (F10), shift right (F11), page up (F7), and page down (F8). Enter TOP, then BOTTOM on the command input line. Enter DOWN 500 and UP 500 on the command input line. You will learn how to read this system log later.

Copy and paste a few lines from the Log.

N C000000 S0W1 21025 16:15:30.31 00000090 $HASP309 INIT 3 INAC

NC0000000 S0W1 21025 16:16:07.53 INSTREAM 00000290 LOGON

N 4080000 S0W1 21025 16:16:19.88 00000090 IKJ606I TSOLOGON REJECT

N 0000000 S0W1 21025 16:16:21.46 TSU03598 00000290 IEA631I OPERATOR MARIS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* BOTTOM OF DATA \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2. Review the SCROLL value to the far left on the command input line: Scroll ===> PAGE

Tab to the SCROLL value. The values for SCROLL can be:

**C or CSR** Scroll to where you placed the cursor

**P or PAGE** Full page or screen

**H or HALF** Half page or half screen

3. You will find the SCROLL value on many ISPF panels, including the editor. You can change this value by overwriting the first letter of the scroll mode over the first letter of the current value. Change the value to CSR, place the cursor on another line in the body of the system log, and press F7.

Did it place the line with the cursor at the top?

Yes. It place the cursor to the top.

4. Enter ST (status) on the SDSF command input line to retrieve the status of all jobs

in the input, active, and output queues. You can scroll this information by pressing F7 (page up), F8

(page down), F10 (shift left), or F11 (shift right).

Copy and paste the first few jobs displayed.

NP JOBNAME JobID Owner Prty Queue C Pos SAff ASys Status

KC03A091 JOB00788 KC03A09 10 EXECUTION A HOLD

CICSTS52 JOB02942 KC02743 10 EXECUTION A 2964

KC03H29A JOB03062 KC03H29 15 EXECUTION A HOLD

XYMONZOS JOB03821 STCOPER 10 EXECUTION A 2964

KC03H22S JOB04321 KC03H22 10 EXECUTION A HOLD

5. Now enter SET DISPLAY ON. Observe the values for Prefix, Best, Owner, and Sysname. An \* tells SDSF to filter using any value. To display jobs that you have submitted Enter owner *yourid*.

Copy and paste the new filter values and the few lines of the status display.

PREFIX=\* DEST=(ALL) OWNER=\* SYSNAME=

NP JOBNAME JobID Owner Prty Queue C Pos SAff ASys Status

KC03A091 JOB00788 KC03A09 10 EXECUTION A HOLD

CICSTS52 JOB02942 KC02743 10 EXECUTION A 2964

KC03H29A JOB03062 KC03H29 15 EXECUTION A HOLD

XYMONZOS JOB03821 STCOPER 10 EXECUTION A 2964

6. Enter DA to display only the active jobs. Once again scrolling can be performed using F7 (page up), F8

(page down), F10 (shift left), and F11 (shift right).

**Opening the z/OS UNIX shell and entering commands**

1. From the ISPF Primary Option Menu, select Option 6, then enter the OMVS command. The Unix shell will be displayed with your home directory.

What is your home directory?

KC03CCA:/u/kc03cca:

2. Enter the **id** command.

Copy and paste the response to this command.

uid=1714(KC03CCA) gid=990011(KC81)

**3.** The **date** command shows the time and date. The **man date** command **s**hows the help menu for the **date** command. You can scroll through the panels by pressing Enter. The **man man** command provides Help for the help manual. Enter **quit** to exit the panels.

**5.** The **env** command displays **e**nvironment variables for this session.

What is specified for the PATH environment variable?

PATH=/bin:.

**6. ls** Lists the current directory, **ls -l** lists the current directory in verbose mode and **ls -l /etc.** lists the /etc. directory.

Copy and paste the contents of your home directory (in verbose mode).

KC03CCA:/u/kc03cca: >ls -l

total 0

7. From your home directory, enter the following shell command: **oedit myfile.** This opens the ISPF edit panel and creates a new text file in the current path. Write some text into the editor. Save and exit (F3)…

Copy and paste the contents of ‘myfile’ before attempting to save.

EDIT /u/kc03cca/myfile File saved

Command ===> Scroll ===> PAGE

\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Top of Data \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

000001 qwe

000002 asd

000003 zxc

000004 123

000005 456

000006 789

\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Bottom of Data \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Now save and exit (F3).

Copy and paste the contents of your home directory (in verbose mode).

KC03CCA:/u/kc03cca: >ls -l

total 2

-rwx------ 1 KC03CCA DFSGRP 24 Jan 27 19:18 myfile

**8.** Enter **exit to e**nd the OMVS session.