

COBOL Basics Lab 1

GOALS:

- Sign on to the mainframe.
 - Navigate the ISPF Primary Option menu to find HELLO1 and view it.
 - Navigate out and sign off.
1. Use the **Course Lab Kit** to get your **ID** and **PASSWORD** (*write your ID and PASSWORD in a safe place because you will need it again!*) and begin your mainframe session. The first thing you will see once you sign on looks something like this:

```
ICH70001I TSOZC01  LAST ACCESS AT 14:29:41 ON THURSDAY, MARCH 18, 2021
IKJ56455I TSOZC01  LOGON IN PROGRESS AT 14:39:26 ON MARCH 18, 2021
IKJ56951I NO BROADCAST MESSAGES
Allocating ISPF/PDF environment...
Test for Netmail
INMR003I You have no messages or data sets to receive.
%C12 EZCL01

Your assigned DB2 Subsystem is DSNB

Allocating DB2 libraries now.  Please wait for ***
You can hit enter once you see the three asterisk.

*** _
```

2. The 3 asterisks at the bottom are a signal to press the **ENTER** key to continue.

The next screen, called the **ISPF Primary Option Menu** looks something like this:

```
Menu  Utilities  Compilers  Options  Status  Help
-----
                                ISPF Primary Option Menu
Option ==> _
0  Settings      Terminal and user parameters
1  View          Display source data or listings
2  Edit          Create or change source data
3  Utilities     Perform utility functions
4  Foreground    Interactive language processing
5  Batch         Submit job for language processing
6  Command       Enter TSO or Workstation commands
D  Db2           Db2 Menus
E  ITS MENU      ITS extended menu
S  SDSF          System Display and Search Facility
```

The cursor is near the top, to the right of the word **Option**.

3. To retrieve your COBOL program, you need to type this in: **3.4** and then press **ENTER**.

This will take you to the **Data Set List Utility**. Your ID is shown in the middle, to the right of the words **Dsname Level**.

```
                                Data Set List Utility
Option ==> _
                                     More:
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 . . . TSOZC01
Volume serial . . .
```

4. Now press the **ENTER** key, and you will see a list of all your data sets (also known as files).

```
Menu Options View Utilities Compilers Help
-----
DSLIST - Data Sets Matching TSOZC01
Command ==>
Command - Enter "/" to select action
-----
      TSOZC01
  E   TSOZC01.COBOL.LABS
      TSOZC01.DATA
      TSOZC01.EXEC
      TSOZC01.ISPF.PROFILE
      TSOZC01.JCL.CNTL
      TSOZC01.SPUFI.IN
      TSOZC01.SQLOUT
      TSOZC01.TSOLOG.DATA
```

The list of datasets reveals one by the name of **TSOZC01.COBOL.LABS**. The first part of the name (TSOZC01) is likely to be different, as each student will have a unique ID. Don't worry about this!

- Place your cursor to the left of the **TSOZC01.COBOL.LABS** dataset, and type this single letter **E**.
- Then press the **ENTER** key. This will take you to a list of COBOL programs!

```

Menu  Functions  Confirm  Utilities  Help
-----
EDIT      TSOZC01.COBOL.LABS
Command ==> _____
Name      Prompt      Size      Created
-----
COB01
COB10
COB20
E         HELLO1      20      2021/02/05
HELLO2    36      2021/02/05
**End**

```

- Place your cursor to the left of the **HELLO1** program (this is also known as the “HELLO1 member”) and type this single letter **E**.
- Then press the **ENTER** key. This will take you to the COBOL program!

```

File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
-----
EDIT      TSOZC01.COBOL.LABS(HELLO1) - 01.02      Columns 00007 00078
Command ==> _____      Scroll ==> CSR
***** Top of Data *****
000100  IDENTIFICATION DIVISION.
000200  PROGRAM-ID. HELLO1.
000300  ENVIRONMENT DIVISION.
000400  *****
000500  * THIS PROGRAM DISPLAYS A 'HELLO WORLD' MESSAGE that will
000600  *   SHOW UP IN THE SYSOUT OF THE JOB OUTPUT.
000700  *****
000800  CONFIGURATION SECTION.
000900  SPECIAL-NAMES.  SYSIN IS SYSIN.
001000  INPUT-OUTPUT SECTION.
001100  DATA DIVISION.
001200  FILE SECTION.
001300  WORKING-STORAGE SECTION.
001400  01  WORK-FIELDS.
001500      05  HELLO-WORLD-SWITCH          PIC X(1)      VALUE 'Y'.
001600  PROCEDURE DIVISION.
001700  ** THIS PROGRAM WILL PUT 'HELLO WORLD' ON THE OUTPUT      **
F1=Help    F2=Split    F3=Exit    F4=Expand    F5=Rfind    F6=Rchange
F7=Up      F8=Down     F9=Swap    F10=Left     F11=Right   F12=Cancel

```

Welcome to the mainframe editor! The editor allows you to scroll down by pressing the **F8** key and to scroll up by pressing the **F7** key (more at the bottom of the screen).

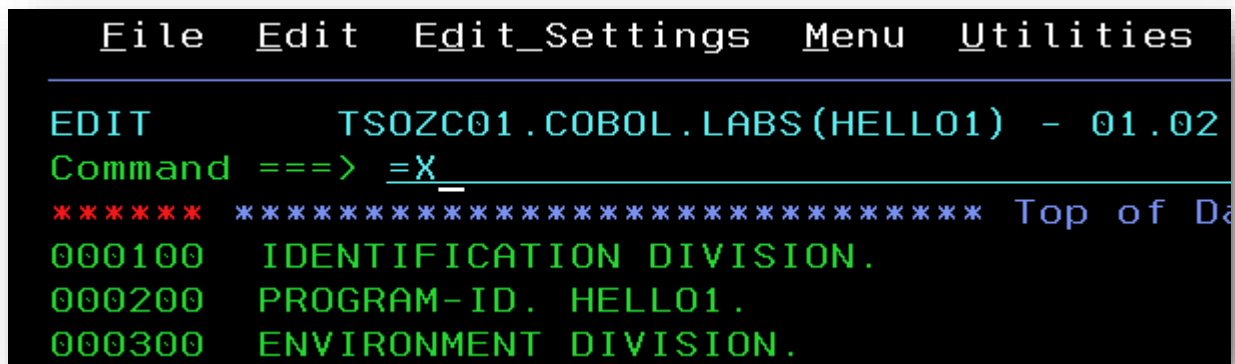
Congratulations! You Signed on to mainframe, navigated the ISPF Primary Option Menu to find the HELLO1 program.

When you finished viewing it, you need to navigate out and sign off.

How?

Look at the bottom of the screen! There is a function key that you can press several times to Exit. A faster way is to do this:

6. At the top of the screen, to the right of **Command** ==> type **=X**.

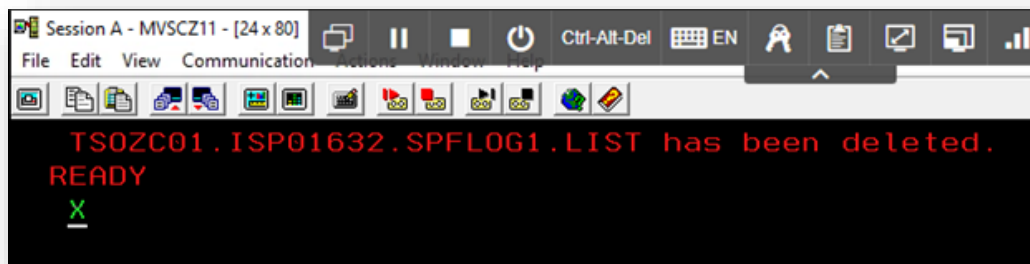


The screenshot shows the ISPF editor interface. At the top, there is a menu bar with options: File, Edit, Edit_Settings, Menu, and Utilities. Below the menu bar, the text "EDIT TSOZC01.COBOL.LABS(HELLO1) - 01.02" is displayed. The "Command" field is highlighted, and the text "=X" is entered. Below the Command field, there is a line of asterisks and the text "Top of Data". The main body of the screen displays the following text:

```
000100 IDENTIFICATION DIVISION.  
000200 PROGRAM-ID. HELLO1.  
000300 ENVIRONMENT DIVISION.
```

Be sure your exit sign (**=X**) is placed where there is a line beneath it.

When you press enter, you will land here:



The screenshot shows the ISPF editor interface after pressing the ENTER key. The text "TSOZC01.ISP01632.SPFL0G1.LIST has been deleted." is displayed in red. Below this, the text "READY" is displayed in green. The "X" key is highlighted in green.

7. Type the letter **X** and press the **ENTER** key and you will be signed off!

We are finished now!