Lab 4. Reading Records

Note: All action items followed by a * sign, include exercise hints, which are located at the end of this exercise.

Overview

This lab demonstrates the ‘end-of-file’ COBOL coding technique for reading all data records from a sequential file.

Objectives

- Familiarize with COBOL source code vs. JCL
- Identify error in program using the IGY message
- Correct the source code
- **Analyze ABENDU4038 output**
- Correct the JCL

Lab instructions

1. If not already, open VSCode and select Zowe Explorer from the left sidebar.

Note: If you are opening a new instance of VSCode (i.e. you closed out of it after the previous usage), you may need to 'Select a filter' again. You can do so by selecting the search icon (🔍) next to your named connection in the DATA SETS section and then reselecting the filter previously used. It should be in the listed filters after you have selected the search symbol.

2. View these COBOL source code members listed in the **id.CBL** data set:
   - **CBL0001**
   - **CBL0002**

3. View these three JCL members in the **id.JCL** data set:
   - **CBL0001J**
   - **CBL0002J**
   - **CBL0003J**

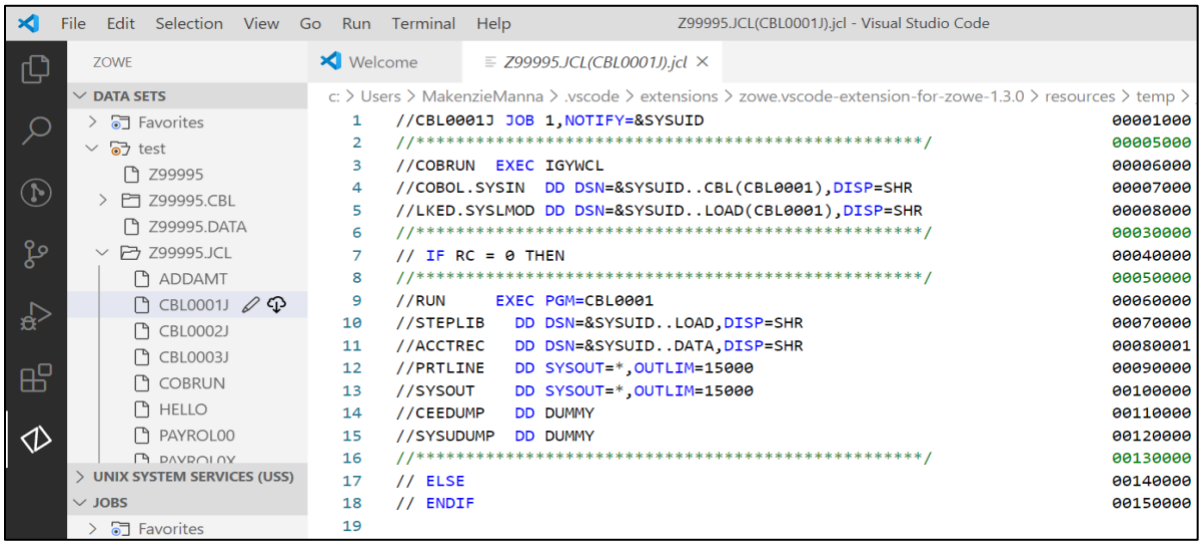

Figure 1. *Id.JCL(CBL0001J).jcl*

4. Submit job, **JCL(CBL0001J)**, within the DATA SET section.

5. View that job output using the JOBS section.
   - **COBRUN:SYSPRINT(101) -** COBOL program compiler output

- **RUN:PRTLINE(103)** - COBOL program execution output, shown in Figure 2.

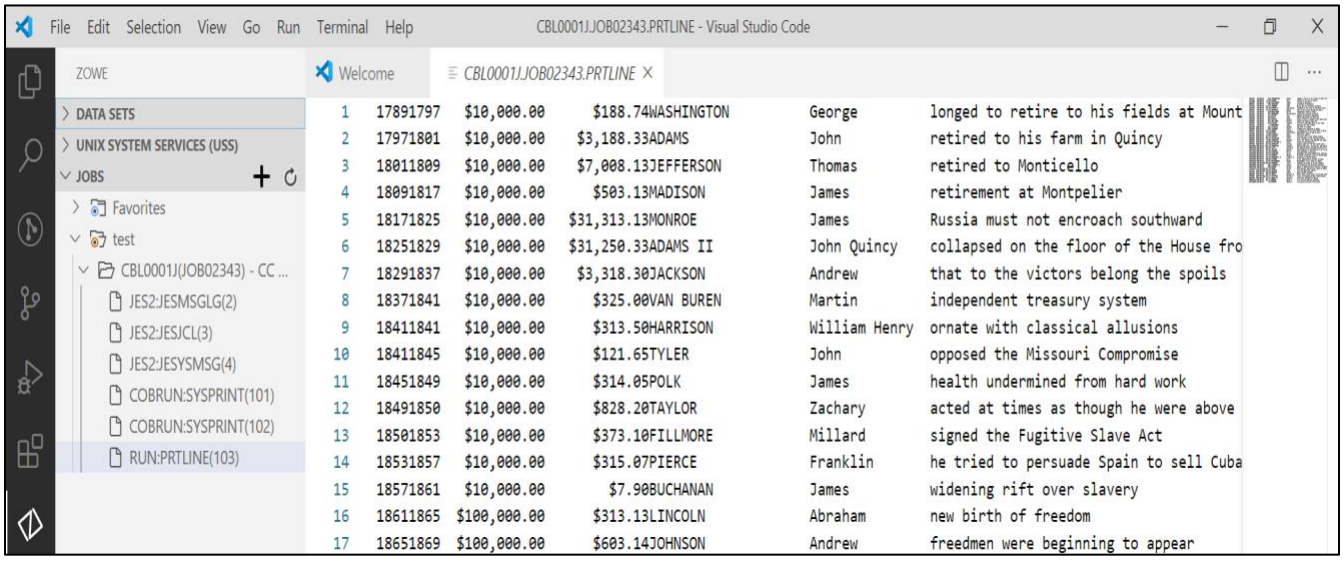

Figure 2. *RUN:PRTLINE(103) for JCL(CBL0001J)*

6. Submit job, **JCL(CBL0002J)**, within the DATA SET section.

7. View that job output using the JOBS section.
   - **COBRUN:SYSPRINT(101)** - COBOL program compiler output

   Locate COBOL compiler severe message IGYPS2121-S within the output file referred to in step 7, shown in Figure 3.

```
==000074==> IGYPS2121-S "PRINT-REX" was not defined as a data-name.  The statement was discarded.
```

Figure 3. *IGYPS2121-S message*

8. Edit **CBL(CBL0002)**:
   - Determine appropriate spelling of PRINT-REX, correct it within the source code and save the updated source code.

9. Re-submit job, **JCL(CBL0002J),** using the DATA SET section and view the output in the JOBS section.
   - **COBRUN:SYSPRINT(101)** COBOL program compiler output
   - **RUN:PRTLINE(103)** is the COBOL program execution output (if correction is successful)

10. Submit job, **JCL(CBL0003J),** using the DATA SET section.

11. View **CBL0003J ABENDU4038** output, using the JOBS section:
    - View the **IGZ00355** abend message in **RUN:SYSOUT(104)** from the COBOL program execution output.
    - **IGZ00355** reads, program is unable to open or close ACCTREC file name, shown in Figure 4. guiding you to the root of the error.

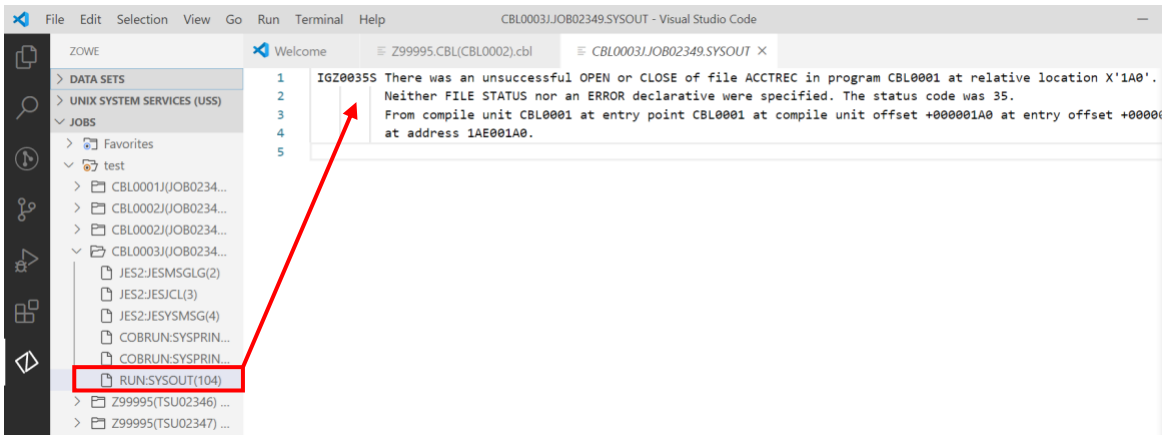

Figure 4. *RUN:SYSOUT(104) message*

12. Fix this error by editing **JCL(CBL0003J):**
    - Determine the DDNAME needed, but missing or misspelled. *
    - Correct it within the code and save

13. Re-submit job, **JCL(CBL0003J),** using the DATA SET section.

14. View **CBL0003J** output using the JOBS section, your output should look like Figure 5.
    - **RUN:PRTLINE** - COBOL program execution output (if correction is successful)

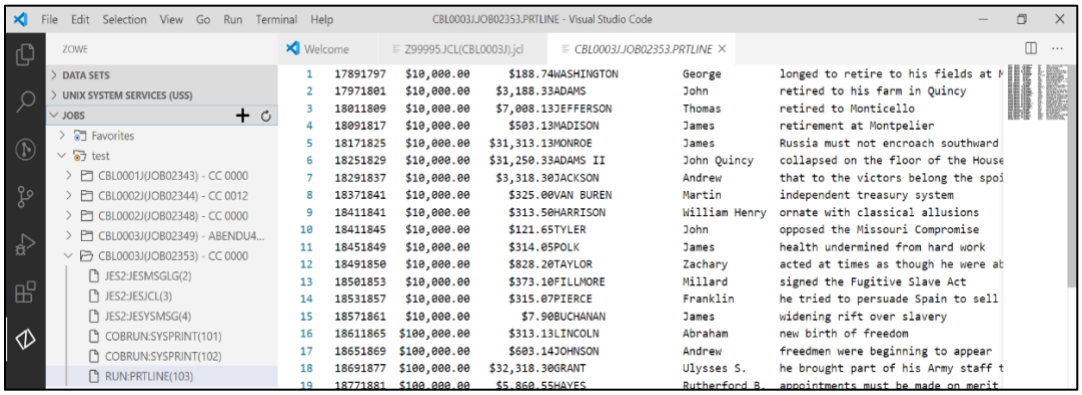

Figure 5. *RUN:PRTLINE(103) for JCL(CBL0003J)*

Lab hints

13. The error is located on line 11, adjust '**ACCTREX**' accordingly.

```
10    //STEPLIB   DD DSN=&SYSUID..LOAD,DISP=SHR
11    //ACCTREX   DD DSN=&SYSUID..DATA,DISP=SHR
12    //PRTLINE   DD SYSOUT=*,OUTLIM=15000
```

Figure 6. *Error in id.JCL(CBL0003J).jcl*