## Extracting Data

It is quite often that a programmers will be asked to extract data from a large file to a smaller file. This can be done with a basic simple COBOL program to read one input file and output one smaller file.

## INPUT:

* //SYSUT1 DD DSN=SHARE.GET433.STUDENT.DATA(CBL4),DISP=SHR
* Name 1 thru 20 PIC X(20)
* Address 21 thru 40 PIC X(20)
* Social Security No 41thru 49 PIC 9(9)
* Credits 50 to 51 PIC 99
* Year of Graduation 52 to 55 PIC X(4)
* Sequential zOS file, 80 bytes per record
* DISP=SHR - means all can use as for input

**PROCESS:**

* **Create a COBOL base program in your source library**
* **Define the INPUT (SELECT, FD, OPEN, READ, CLOSE)**
* **Define the OUTPUT (SELECT, FD, OPEN, WRITE, CLOSE)**
* **Write the necessary PROCEDURE DIVISION statements to read through all of the input file and extract all records to the output file to get all students graduating from 2018 and later. Count the number of input records and the number of output records.**
* **Code the population of data in the output file and write the record if it meets the above criteria.**
* **When you have reached the end of the input file, close the files, display the record counts and end the program.**
* **Create a JCL member in your JCL Library for LAB2.**
* **Ensure you have a JOBCARD in your JCL member (your name and RACF-id is in the JOBCARD.**
* **Create a line of JCL for the execution of the program (SUnnPGM1).**
* **Add JCL lines for the input file and the output file. See zOS Basics for help in coding those files.**
* **Have your JCL checked by your Lab partner(s).**
* **Run your JCL and check the output.**
* **If there is an error (JCL?), debug the JCL until you get a successful run.**
* **Answer the questions at the end of this Lab and place the answers in Blackboard.**
* **Take a screen shot of your output file and place it in Blackboard.**

**OUTPUT:**

* Name 1 thru 20 PIC X(20)
* Address 21 thru 40 PIC X(20)
* Social Security No 41thru 49 PIC 9(9)
* Credits 50 to 51 PIC 99
* Year of Graduation 52 to 55 PIC X(4)
* Sequential zOS file, 80 bytes per record

**//SYSUT2 DD DSN=SUS00nn.GET433.LAB2.OUTPUT,**

**// DISP=(NEW,CATLG,DELETE),**

**// DCB=(BLKSIZE=0,LRECL=80,RECFM=FB),**

**// SPACE=(CYL,(1,1),RLSE),**

**// UNIT=SYSDA**