COMP251 – LAB 6 FALL2023 the SORT.

**Start by making a copy of KC02134.SLC.CPA.COBOL(LAB6) and KC02134.SLC.CPA.CNTL(LAB6) into your libraries.**

Use EDIT to modify your CNTL(LAB6) to change:

1.modify JOB card to have your userid, and put your name in the quoted name field

2.Note in the JCL , the input data is in-line data following the //GO.STUIN DD \* statement, check the order of the records.

3.use command SUB to submit the job

4.use F3 to save

View the “SYSOUT” output of the job, verify that the input data is printed in the original sequence. After viewing, delete the output from the job. You are doing this step to view the original output from the job. You will now need to add the sort command.. Follow the instructions.

Use edit to modify your COBOL(LAB6) to change:

* Modify the S01-SORTWORK-RECORD definition to define the first name and last name fields ( same as F01-STUDENT-RECORD ). Leave the remaining 8 bytes as filler. Notice that the S01-SORTWORK-RECORD is shorter than the F01-STUDENT-RECORD, there is no need to send the unused 52 bytes to the sort.
* Modify the procedure division to add a SORT statement at the beginning of the program.

Specify S01-SORTWORK-FILE as the sort-file. Use F01-STUDENT-FILE as the input file and F02-SORTED-FILE as the output file and specify ascending sort on the last name ( major key ) and the first name ( minor key ) fields. Add this command in the “PROCEDURE DIVISION” just BEFORE the initial DISPLAY statements. Syntax for SORT command is:

SORT sd-file-name

ASCENDING KEY sd-key-field1 sd-key-field2

USING fd-input-file

GIVING fd-output-file

* CHANGE THE OPEN AND CLOSE COMMANDS TO THE SORTED FILE.

Use CNTL(LAB6)

Submit the program to be run, fix any compile errors.

Extra items to note:

* all the messages in the display output are from the sort program.
* the SORTWORK file record was truncated to 28 bytes, all the trailing blanks were not needed to sort the names and phone numbers. The COBOL compile step created a CONDCODE of 04. The COBOL SYSOUT listing shows a WARNING message to inform you of the record truncation.

**IGYPA3066-W The record length of "USING" file "F01-STUDENT-FILE" was greater than the record length of "SD" "S01-SORTWORK-FILE". Truncation of data may occur at execution time.**

**You will also get an informational error that you do not have to worry about!!**