**CSCI 360-1 Assignment 5 - Looping, XREAD and XPRNT Spring 2019**

**100 points**

For this assignment you will write a program named ASSIGN5 that reads in an unknown number of records, each with three numbers on it. For each record read, print out the numbers, the sum of the three numbers and the quotient of the average of the three numbers on the record. Double space each output detail line.

Your output should look like this but double-spaced:

4500 -230 9 4279 1426

0 7 2 9 3

8516 2853 0 11369 3789

20 0 3245 3265 1088

5529 6977 1681 14187 4729

1013 250 85 1348 449

0 3364 5275 8639 2879

-887 1100 2293 2506 835

1234 8447 4591 14272 4757

-89 -7 23 -73 -24

8513 5409 2538 16460 5486

1 2 3 6 2

9999 9998 9997 29994 9998

Note that each number above is right justified in 12 columns. This is because XDECO requires 12 columns into which the converted binary number is placed in the output detail line. This detail line does not show the first column which is carriage control.

Also note that SDSF does not display blank lines to save spool space. To verify double-spacing, press F10 to go to the left one byte and verify that column 1 of every line of your output has a 0 in it.

Once you download the output using mar\_ftp.exe, your .txt file should show the lines actually double-spaced. Verify this before submitting.

Program incrementally! That means that you should first just read a single record and print out the three numbers on the first record. When that works, put in a loop. If you get one part working before moving on to the next, your debugging will be much easier and less time consuming.

Use a top driven loop as expressed in the following pseudocode:

READ FIRST RECORD  
WHILE (NOT EOF)    🡨 IF EOF, BRANCH TO END LOOP  
  BODY OF LOOP  
  READ NEXT RECORD  
  BRANCH TO TOP OF LOOP  
END LOOP

Replace everything that follows your actual Assembler code in your program with the lines (in blue) below. **Note the END statement of your program has been shown here as a point of reference:**

END ASSIGN5

/\*

//\*

//FT05F001 DD \*

4500 -230 9

0 +7 2

8516 2853 0

0020 0 3245

5529 6977 1681

1013 250 85

0 3364 5275

-887 1100 2293

1234 8447 4591

-89 -7 23

8513 5409 2538

0001 0002 0003

9999 9998 9997

/\*

//FT06F001 DD SYSOUT=\*

//

The // line indicates the LAST thing in your JCL!

**DO NOT FORGET TO FULLY DOCUMENT YOUR PROGRAM AS DESCRIBED IN THE CSCI 360 COURSE NOTES BEGINNING ON PAGE 9.**

Use mar\_ftp.exe to download a .txt copy of your program's output. **Be sure to open the file, scroll to the bottom, and make sure that it is all there!** Submit the .txt file on Blackboard as before.