CSCI 360-1 **Assignment 5a – Multiplication and Division** **Fall 2017**
60 points

This is the first of a two-part assignment. You are to write an Assembler program to calculate payroll for a business. Each employee has an hourly pay rate, a number of hours worked in the pay period, a deduction amount for any lunches eaten in the company cafeteria during the pay period, and a bonus amount. Of course, each employee has a name and employee identification number.

Input

Each input record contains, from left to right across the 80-byte record, the following data about a single employee: employee id number, hourly pay rate, number of hours worked in the pay period, deduction amount, and bonus amount, with the three dollar amounts rounded to the whole dollar. Following the five numbers and beginning in column 25 and for a length of 25 bytes is the employee's name. (Hint: Use MVC to move this character string to the print line.)

Calculations

Your program must calculate each employee's gross pay amount using the following formula:

gross pay amount = hourly pay rate * number of hours worked – deduction amount + bonus amount

Your program also must count the number of employee's processed and must keep a running total of the gross pay amounts and a running total of the bonus amounts.

Finally, after the loop ends, your program must calculate the average gross pay amount for the employees listed. Use the following formula:

average gross pay amount = total gross pay amount / employee count

When preparing to print the average, disregard the remainder and display only the quotient of the division.

Output

For each record, print out (using XPRNT) the employee's name, employee id number, hourly pay rate, number of hours worked, deduction amount, bonus amount, and, finally, the gross pay amount that you calculated across one output line, double spaced. At the end of the report, and on separate lines and on the left, just under the employee's name, print out the number of employees processed, the total bonus amount and the total gross pay. And finally, on a fourth line, print out the average gross pay amount. Be sure that you double space all of the output lines. For guidance, see the exact output document named:

360 Assign 5a Exact Output Fa17.txt

Important Notes

Copy the following highlighted lines JCL and data below ***immediately*** after your program's END statement:

```
/*
//*
```

```
//FT05F001 DD *
12345 15 80 25 500     JOAN TOWER
23456 19 80 0  10      WOLFGANG AMADEUS MOZART
22132 10 80 31 200     RICHARD STRAUSS
65465 22 80 15 900     AMY BEACH
44560 23 28 34 70      DAME ETHEL SMYTHE
99870 22 80 21 0       PETER ILYICH TCHAIKOVSKY
14966 20 78 0 210      ANTON BRUCKNER
/*
//*
//FT06F001 DD SYSOUT=*
//*
//SYSPRINT DD SYSOUT=*
//
```

Make sure all of the lines above replace everything you might currently have from Assignment 4 immediately following your program's END statement. Note that the numbers on each of the seven (7) input lines, or records, do not have to line up vertically but each of the employee names ***must*** begin in column 25! Note that you do NOT need to try to highlight them in TSO/ISPF; it is done here just to show you which lines to copy.

Other

Fully document your program as instructed in the CSCI 360 Course Notes.

Be sure you are using the structured read loop as taught to you in class.

Be sure that your ENTIRE output is included in the .txt file BEFORE you submit it for grading. If any or all of it is missing, you will earn a 0 on the assignment.

Submit the .txt output from Marist on Blackboard as before.