COSC 1306
Spring 2020

Assignment 3: If-Statement

[1] **Objectives**: This is the first assignment that you are going to control the flow of your program by using IF. You will have to use IF-ELIF-ELSE or its simplified form. In doing so, you will be writing Boolean expressions and possibly some logical operators. It is also part of this assignment that you will be doing more formatting of your output. Some of you have been using the old style of formatting such as %5.2f. You are encouraged to use the new style such as {:5.2f}.

[2] **Requirements**: In this assignment, you are going to help the professors compute the combined score of the three tests given during the semester. Each test score is between 0 and 100. However, the weight of each score may not be the same. Maybe the professor wants to give the first two tests 30% each ad the last test 40%. Your program should ask the professor to enter the weight (integer) of each test. The three weights should add up to 100%, otherwise terminate the program and print a message.

- Input:
    - Ask for the test scores, and weights for tests 1, 2, and 3 separately.
    - Check for correctness of scores. If a test score is less than 0, set it to 0. If a score is more than 100, set it to 100.
- Processing:
    - Compute the combined score using the weight, i. e., test1*wt1 + test2*wt2 + test3*wt3.
    - Determine the letter grade (A for >= 85, B for >= 70, C >=55, D >= 40, F for below 40). You may have to write a long if-elif-else here.
- Output:
    - Print out the combined score.
    - Print out the letter grade.

At some point in doing this assignment, you will probably complain about why do you have to repeat some codes multiple times. Well, that is because we have not got to the chapters on loops, lists, and functions. So, things will get better. You are encouraged to redo this assignment after we talked about more Python syntax.

[3] **Output**: Two sample executions of the program look like the figures below. Please make sure the columns line up properly.

```
Enter Marks (max 100) for Test1: 99
Enter Weightage (in %) for Test1: 30
Enter Marks (max 100)for Test2: 88
Enter Weightage (in %) for Test2: 30
Enter Marks (max 100) for Test3: 77
Enter Weightage (in %) for Test3: 40
Combined Score = 86.90
Letter Grade =  A
```

```
Enter Marks (max 100) for Test1: 88
Enter Weight (in %) for Test1: 30
Enter Marks (max 100)for Test2: 99
Enter Weight (in %) for Test2: 30
Enter Marks (max 100) for Test3: 55
Enter Weight (in %) for Test3: 30
Sum of Weights is less than 100. Quit.
```

[4] **Deadline**: 2:15 pm, Wednesday, February 12, 2019.