PA 2

The programming assignment is to practice the if condition as well as while, do while, and for loops.

Program: GPA calculate

1. Define a function to print out "Welcome to the GPA calculation program!"
2. Define a function that:
    i. Print out a sentence to guide the user to do the below input
    ii. Read in data from keyboard for a person's name and the grades for classes.
        1. Computer science, credits 4
        2. English, credits 3
        3. Writing, credits 3
        4. data mining, credits 4
        5. math, credits 2
    iii. Calculate the average GPA of each person (round the GPA to 1 digit)
        1. 90 < Grade <=100: gpa 4.0
        2. 85 < Grade <=90: gpa 3.5
        3. 80 < Grade <=85: gpa 3.0
        4. 75 < Grade <=80: gpa 2.5
        5. 70 < Grade <=75: gpa 2.0
        6. 60< Grade <=70: gpa 2.0
        7. Grade <=60: gpa 1.0

        The average gpa = the corresponding GPA for the grade of class1 * the class credit + the corresponding GPA for the grade of class2 * the class credit + …

        For example, if a person Katy's grade for the above five classes is:
        100, 100, 80, 90, 100
        the corresponding gpa of each class is:
        4.0, 4.0, 2.5, 3.5, 4.0

        The average gpa = 4.0*4 + 4.0*3 + 2.5*3 + 3.5*4 + 4.0*2 = 3.6

    iv. Return the person's name and the average GPA to the main function

3. In the main function:
    a. Call the function (defined in step 2) 10 times to read in and calculate the average gpa of 10 people.
    b. Each time, after calling the function, print out the name and average gpa on the terminal. For example:

        Katy 3.6

c. The final printed out results would be 10 rows:

Katy 3.6

Josh 3.6

……