

Programming assignment 1

Objective:

To successfully be able to use the programming basics, you have learned from previous lectures and labs in this class up to this point, in writing a code (program) that runs with no errors and gives the correct output.

Skills needed:

- Knowledge of programming basics from previous lectures and labs in this class up to this point.
- Hands on Eclipse.

Task:

1. Given a person's year of birth, the Birthday Wizard can compute the year in which the person's nth birthday will occur or has occurred. Write statements that can be used in a Java program to perform this computation for the Birthday Wizard.

Example:

Here is an example of what your output could look like:

My name is YourName

Program 1: Birthday Wizard

Greetings.

What year were you born in?

1991

Input

Choose an age in years:

38

Input

You will turn 38 in the year 2029

Output

2. Create a Program that:

- Prompts the user for 5 Grades (0-100)
- Calculates the average of those grades.
- Prints the average grade to two decimal places.
- Then it should determine the letter grade for that average.
- The letter grade is based on the following grade range:
A: 90-100% B: 80-89% C: 70-79% D: 60-69% F: otherwise

Example:

Here is an example of what your output could look like:

My name is YourName

Program 2: Calculating the average of grades.

Enter 5 Grades (0-100):

97
94
78
84
66

← **Input**

The average of the 5 grades is 83.80
Letter grade is: B

← **Output**

Your programs and all further programs should have **program description header** that goes at the top of the file which gives information about the programmer and program.

```
////  
// Name: Bob Programmer  
// Section: A, B, or S  
// Program Name: Hello World  
//  
// Description: A brief description of the program. What does the  
// program do (not how it does it: for example, it uses loops)? Does  
// the program get input? What kind? What information is output  
// from the program and to where (screen or file)  
////  
  
import...
```

Run your program three times with different input numbers. For each time that you run your program take a screenshot of your program's output to the bottom of your code. This will be needed in your report. In order to know how to write up your report, take a look at the attached word document and follow the instructions.

Grading Criteria:

I will be looking at the following things: **(Total Points: 100)**

- Do you have a program description header (in your code) as shown in the above example? **(10 pts)**
- Did you get the correct output? **(40 pts)**
- Did you choose good variable names? **(20 pts)**
- Did you indent the code properly? **(10 pts)**
- Is your output easy to read? **(5 pts)**
- Did you attach the report with the output from the test runs in your report? **(15 pts)**