COP 2220 Sample Midterm Exam questions, spring 2017.

1. Write the ***function prototype*** for a function called **AverageAge.**
   The function takes 3 arguments of type integer and returns a double, the average of the 3 arguments.

2. Write the ***function definition*** for a function called **LetterGrade** that takes two double arguments **grade1** and **grade2** and returns a character. If the average of the 2 grades is 90.0 or above the function will return a capital E, if the average is between 70.0 and 90.0 the function will return a capital S, if average is 70.0 or below the function will return the capital letter U.

3. Write the definition for a function called **Larger** that takes two arguments. The function should return the larger of the two values. You should not assume that the variables will contain different values.

4. Write a set of statements to perform the following steps: When the variable **fruit** contains the character uppercase P, increase the value in the integer variable **papaya** by one. When fruit contains the character uppercase G, increase the value in the integer variable **guava** by one. When fruit contains anything else, increase the value of the integer variable **bananas** by one.

5. Write a loop that will add up the squares of the first 100 whole numbers and store the result in the variable called **total.** Declare and initialize any variables.

6. Write a function called **Product**. The function will prompt the user to enter integers one by one and calculate the product of all the numbers entered, until the user enters a zero to stop.
   The function will return the product of all the numbers entered. Declare and initialize any variables needed.

7. **THIS QUESTION HAS 3 PARTS:**

   1. A main function with the function calls to **GetL** and **GetD.** Declare any variables and assign values as needed.

   2. Include the function definitions described below. Declare any variables and assign values as needed.

   3. Add the function prototypes

   You do not need to include comments or preprocessor directives

   Function 1. Write a function definition called **GetL** that takes no arguments and returns a character. The function will prompt the user to enter a character, get a character, and return it.

   Function 2. Write a function definition called **GetD** that takes no arguments and returns a double. The function will prompt the user to enter a double, get a double, and return it.