LAB TEST 03 (G1)   time: 1hr
CSE 2112
Object Oriented Programming Lab

Problem 01:

1. Create an exception class named *AgeOutOfRangeException* extended from the class Exception. This class should contain a constructor which takes the user's age (ex. 40) as parameter. Will print following message when called, "You are older than the requested age (25 years), you are 40!!! ".

2. Create an exception class named *LowGpaException* extended from the class Exception. This class should contain a constructor, with no parameter to call the Exception class constructor with the message "Your GPA is not sufficient to apply for this job (2.5)".

3. Create a main class named GPA to prompt the user to enter his/her age and his GPA. The user application for a job will be rejected either if his age is greater than 25 years or his GPA is less than 2.5. You should declare two try-throw-catch blocks; one to handle the *AgeOutOfRangeException* and the other to handle the *LowGpaException*. If the user enters acceptable age and GPA, display the message "Your application is accepted and is under study".

Problem 02:

1. Create an exception class named *NegativeNumberException* extended from the class Exception. This class should contain a parameterless constructor to call the Exception class constructor with the message "You should enter a positive number".

2. Create a class named Problem 02 that contains:
   a. A method named M1 that accepts a double variable as argument and returns its square root. The method should throw the *NegativeNumberException* exception defined above.

b. The main method to prompt the user to enter a number and then to call the method M1 (insert a try-catch block to handle the *NegativeNumberException* exception).