# Chapter 11 Programming Assignment

**Purpose:** To write an Object-Oriented application that creates a Java class with several instance variables, a constructor to initialize the instance variables, several methods to access and update the instance variables’ values, along with other methods to perform calculations. In addition, Java Exception Handling is used to handle exceptions within the application. Also, write a test class that instantiates the first class and tests the class’s constructor and methods.

## **Details:**

## Rewrite the Rectangle class you wrote for Chapter 8 programming assignment to throw an IllegalArgumentException indicating there is a problem with the input parameters in the constructor and the set methods.

## Also, rewrite the RectangleTest class from Chapter 8 to handle the exceptions thrown by the Rectangle class. ***Thoroughly*** tests the Rectangle class’s methods. This test class does not need to ask users for input. Just create the needed Rectangle objects to ensure that you test the Rectangle class’s methods well. The thoroughness of your testing in will impact your grade.

Upload both source files to Blackboard.

**Note:** Ensure that your program is properly formatted and it follows all Java naming conventions.