CSC253 – Programming III

Class Activity 1 – Total 25 pts

Create a class Rectangle with double attributes length and width. The default constructor should set these attributes to 1. Provide methods that calculate the rectangle's perimeter and area, as well as accessors and mutators for both data fields. The mutator methods for length and width should verify that the number being passed in is larger than 0.0 and less than 20.0 – if it doesn't fit those criteria, the value of the field should not be changed and set back to these attributes to 1.

Write a Driver class in the separate file to test your Rectangle class. It should prompt the user to enter a length and width of a rectangle, and then print out the area and perimeter of the rectangle.

Sample Run java Driver:

Enter length of rectangle: 7.5

Enter width of rectangle: 3.0

Area: 22.50, perimeter: 21.00

Submit both source files (.java files) only with the suitable comments and code documentations (counts 5 pts).

Professor Sylvia Yeung