**Task 1**

public class Rectangle {

public double length; // from 0.5 to 5.0 cm

public double width; // from 10.0 to 100.0 cm };

1. Have not used encapsulation in which the variables aren’t declared as private They can be directly accessed and modified from outside the class, which can lead to inconsistent or invalid states of the object.
2. public class Rectangle {

private double length; // from 0.5 to 5.0 cm

private double width; // from 10.0 to 100.0 cm };

1. The default constructor initializes all instance variables to a default value (numbers to 0, booleans to false, and object references to null)

public Rectangle() {

length = 0;

width = 0;

}