

King Saud University  
College of Computer & Information Science  
CSC111 – Assignment 7  
All Sections

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## Question 1

Design a class named **MyRectangle** to represent a rectangle. The class contains:

- Two **double** data fields named **width** and **height** that specify the width and height of the rectangle.
- A **double** data field named **area** that specifies the area of the rectangle.
- A **double** data field named **perimeter** that specifies the perimeter of the rectangle.
- A method **printRectangle()** that prints a rectangle made of stars based on the width and height after casting them to **int** type. The method does not accept parameters or return a result.

Draw the UML diagram for the class and then implement the class. Write a test class **TestMyRectangle** with method **main** that does the following:

- Creates two **MyRectangle** objects.
- Assign width 4 and height 8 to the first object and the other with width 3.5 and height 35.9.
- Display the width, height, area, and perimeter of the first then the second rectangle.

- Displays the first rectangle using stars \*.

## Sample Run

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The area of a rectangle with width 4.0 and height 8.0 is 32.0
The perimeter of a rectangle is 24.0
The area of a rectangle with width 3.5 and height 35.9 is 125.64999999999999
The perimeter of a rectangle is 78.8
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