1.

Define a class Rectangle with its length and breadth.

Provide appropriate constructor(s), which gives facility of constructing rectangle object with default values of length pf breadth as 0 or passing value of length and breadth externally to constructor.

- Provide appropriate accessor & mutator methods to Rectangle class.

- Provide methods to calculate area & to display all information of Rectangle.

Design different class TestRectangle class in separate source file, which will contain main function. From this main function, create 3 Rectangle objects by taking all necessary information from the user.

Graphical user interface, text, application

Description automatically generated

**public** **class** Rectangle

{

**public** **void** display(**int** length,**int** breadth)

{

System.***out***.println("Length is "+length);

System.***out***.println("Breadth is "+breadth);

}

**double** calculatearea(**int** length,**int** breadth)

{

**return** length\*breadth;

}

}

**import** java.util.\*;

**class** Testrectangle **extends** Rectangle

{

// Rectangle obj =new Rectangle();

//

**public** **static** **void** main(String[] args)

{

Scanner in = **new** Scanner(System.***in***);

System.***out***.print("Enter length: ");

**int** num1 = in.nextInt();

System.***out***.print("Enter breadth: ");

**int** num2 = in.nextInt();

in.close();

Rectangle obj =**new** Rectangle();

obj.display(num1, num2);

System.***out***.println(obj.calculatearea(num1, num2));

}

}