S.No: 7	Exp. Name: ***Implementing Method overloading***	Date:2024-09-20

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Aim:

Write a Java program with a class name OverloadArea with overload methods area(float) and area(float, float) to find area of square and rectangle.

Write the main method within the class and assume that it will receive a total of 2 command line arguments of type float.

If the main() is provided with arguments : 1.34, 1.98 then the program should print the output as:
Area of square for side in meters 1.34 : 1.7956
Area of rectangle for length and breadth in meters 1.34, 1.98 : 2.6532001

Source Code:

OverloadArea.java

```
public class OverloadArea{
   public static float area(float side)
   {
      return side*side;
   }
   public static float area(float length,float breadth){
      return length*breadth;
   }
   public static void main(String[] args)
   {
      if(args.length!=2)
      {
         System.out.println("please provide exactly two arguments.");
      return;
         }
      try{
         float side=Float.parseFloat(args[0]);
         float length=Float.parseFloat(args[0]);
         float breadth=Float.parseFloat(args[1]);
         float squareArea=area(side);
         System.out.printf("Area of square for side in meters %.2f: %.4f%n",side,squa
reArea);
         float rectangleArea=area(length,breadth);
         System.out.printf("Area of rectangle for length and breadth in meters %.2f,
%.2f: %.7f%n",length,breadth,rectangleArea);
         }
   catch(NumberFormatException e){
      System.out.println("Invalid input.please enter valid float number");
   }
   }
   }
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output

Area of square for side in meters 1.34: 1.7956
Area of rectangle for length and breadth in meters 1.34, 1.98: 2.6532001

Test Case - 2
User Output
Area of square for side in meters 2.30: 5.2900
Area of rectangle for length and breadth in meters 2.30, 2.80: 6.4399996