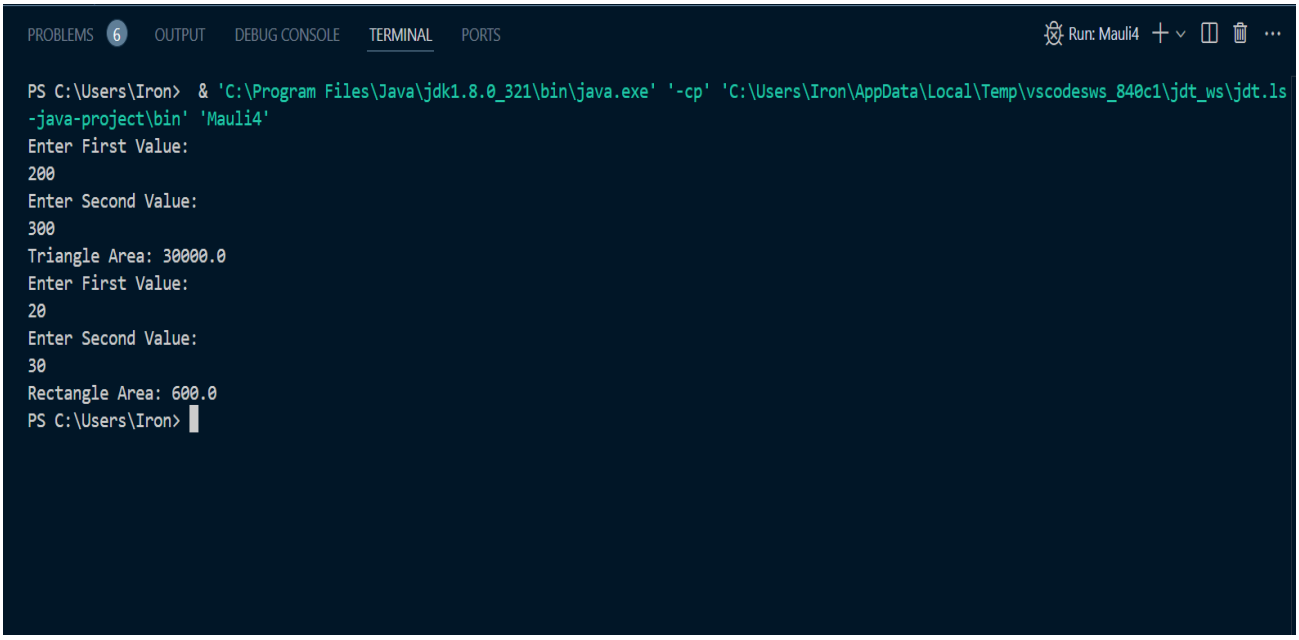
```
* Assignment No: 4
  Design a base class shape with two double type values and member function to
  input the data and compute area() for calculating area of shape. Derive two classes
  Triangle and Rectangle make compute area() as abstract function and redefine this function
  in the derive class to suit their requirement .Write a program that accepts the dimension
  of Triangle /Rectangle and display calculated area. Implement dynamic binding.
  */
import java.util.Scanner;
import java.lang.System;
abstract class Shape
{
  Double val1, val2;
  void input()
  {
    Scanner s = new Scanner(System.in);
    System.out.println("Enter First Value: ");
    val1 = s.nextDouble();
    System.out.println("Enter Second Value: ");
    val2 = s.nextDouble();
  }
  abstract void compute_area();
}
class Triangle extends Shape
{
  void compute_area()
  {
    double area;
    area = 1.0f/2.0f*val1*val2;
    System.out.println("Triangle Area: "+area);
```

```
  }
}
class Rectangle extends Shape
{
  void compute_area()
  {
    double area;
    area = val1*val2;
    System.out.println("Rectangle Area: "+area);
  }
}
public class Mauli4
{
  public static void main(String[] args)
  {
    Shape h;
    Triangle t=new Triangle();
    Rectangle r=new Rectangle ();
    h=t;
    h.input();
    h.compute_area();
    h=r;
    h.input();
    h.compute_area();
  }
}
```

Output:


PROBLEMS 6
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Run: Mauli4
PS C:\Users\Iron> & 'C:\Program Files\Java\jdk1.8.0_321\bin\java.exe' '-cp' 'C:\Users\Iron\AppData\Local\Temp\vscodesws_840c1\jdt_ws\jdt.ls-java-project\bin' 'Mauli4'
Enter First Value:
200
Enter Second Value:
300
Triangle Area: 30000.0
Enter First Value:
20
Enter Second Value:
30
Rectangle Area: 600.0
PS C:\Users\Iron>