















AREA OF A SHAPE ASSIGNMENT

Jupyter Untitled7 Last Checkpoint: a minute ago (unsaved changes)  Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3 (ipykernel) 

       Run    Code  

```
In [1]: import math

def area_circle():
    r = float(input("Enter the radius: "))
    a = math.pi * r * r
    print(f"The area of the circle is: {a}")

def area_rectangle():
    l = float(input("Enter the length: "))
    w = float(input("Enter the width: "))
    a = l * w
    print(f"The area of the rectangle is: {a}")

shape = input("Enter the shape (circle/rectangle): ")
if shape.lower() == "circle":
    area_circle()
elif shape.lower() == "rectangle":
    area_rectangle()
else:
    print("Invalid shape")

Enter the shape (circle/rectangle): circle
Enter the radius: 4
The area of the circle is: 50.26548245743669
```

In []:

C: > Users > User > Desktop > J math2.java > ...

```
1  import java.util.Scanner;
2
3  public class Main {
4      Run main | Debug main
5      public static void main(String[] args) {
6          Scanner scanner = new Scanner(System.in);
7          System.out.println("Enter the shape (circle/rectangle): ");
8          String shape = scanner.nextLine();
9
10         if (shape.equalsIgnoreCase("circle")) {
11             System.out.print("Enter the radius: ");
12             double r = scanner.nextDouble();
13             double a = Math.PI * r * r;
14             System.out.printf("The area of the circle is: %.2f\n", a);
15         } else if (shape.equalsIgnoreCase("rectangle")) {
16             System.out.print("Enter the length: ");
17             double l = scanner.nextDouble();
18             System.out.print("Enter the width: ");
19             double w = scanner.nextDouble();
20             double a = l * w;
21             System.out.printf("The area of the rectangle is: %.2f\n", a);
22         } else {
23             System.out.println("Invalid shape");
24         }
25     }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

Listening on 52304
User program running
Enter the shape (circle/rectangle):
→ circle

Enter the radius:
→ 5

User program finished
The area of the circle is: 78.54

> Please start a debug session to evaluate expressions

```
Desktop > math3.cpp > main()
1  #include <iostream>
2  #include <cmath>
3
4  void area_circle() {
5      double r, a;
6      std::cout << "Enter the radius: ";
7      std::cin >> r;
8      a = M_PI * r * r;
9      std::cout << "The area of the circle is: " << a << std::endl;
10 }
11
12 void area_rectangle() {
13     double l, w, a;
14     std::cout << "Enter the length: ";
15     std::cin >> l;
16     std::cout << "Enter the width: ";
17     std::cin >> w;
18     a = l * w;
19     std::cout << "The area of the rectangle is: " << a << std::endl;
20 }
21
22 int main() {
23     std::string shape;
24     std::cout << "Enter the shape (circle/rectangle): ";
25     std::cin >> shape;
26
27     if (shape == "circle" || shape == "Circle") {
28         area_circle();
29     } else if (shape == "rectangle" || shape == "Rectangle") {
30         area_rectangle();
31     } else {
32         std::cout << "Invalid shape" << std::endl;
33     }
34
35     return 0;
36 }
```