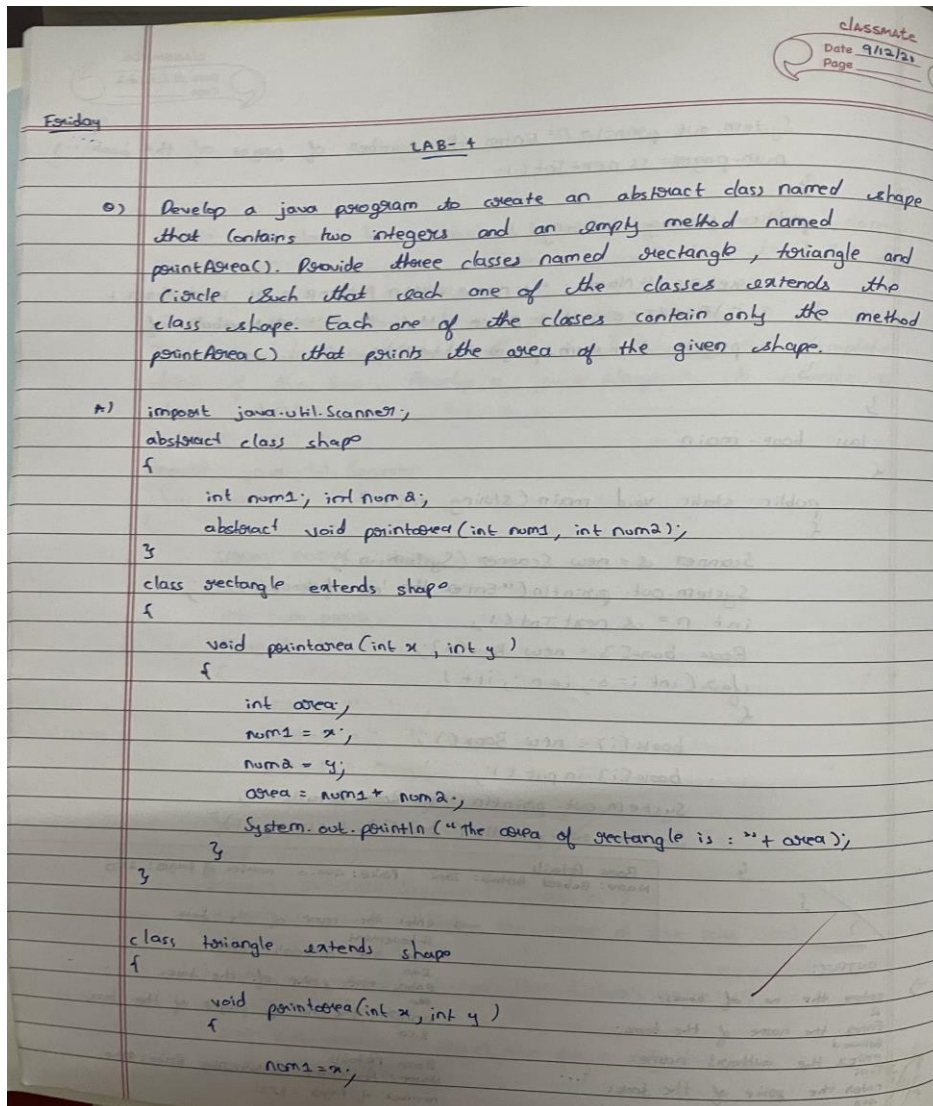


LAB PROGRAM 4:

Develop a Java program to create an abstract class named Shape that contains two integers and an empty method named printArea(). Provide three classes named Rectangle, Triangle and Circle such that each one of the classes extends the class Shape. Each one of the classes contain only the method printArea() that prints the area of the given shape.

CODE SNIPPET:



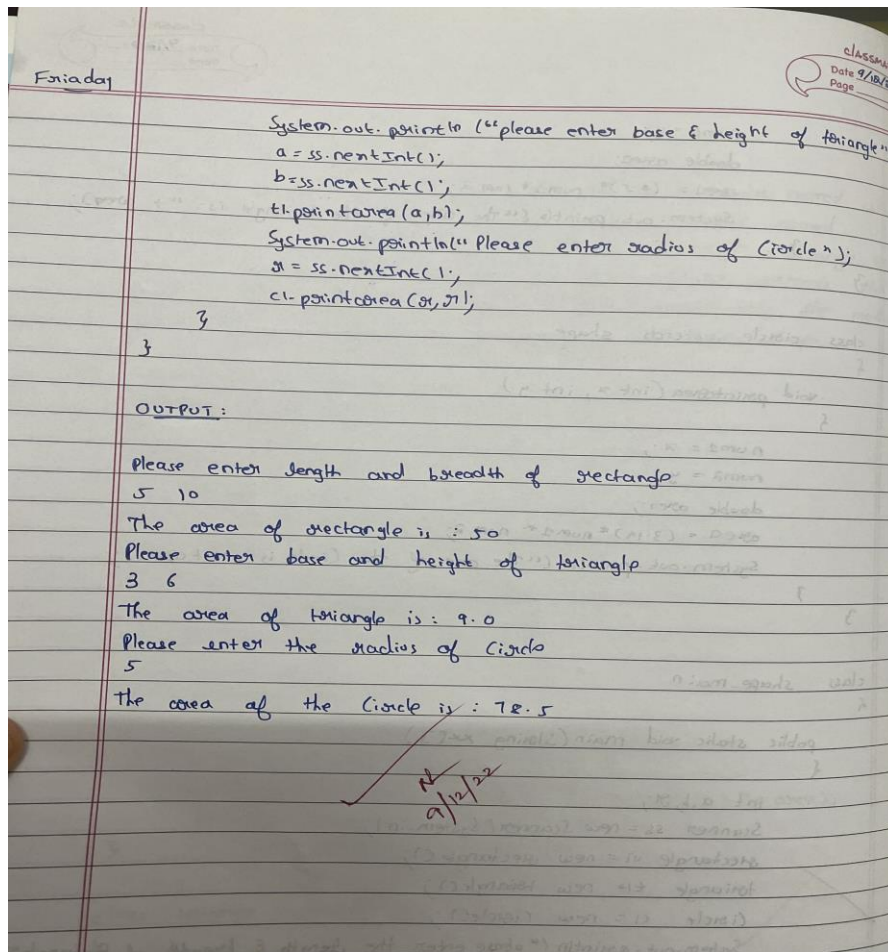
Friday

classmate
Date 9/8/21
Page

```
num1 = y;  
double area;  
area = (0.5) * num1 * num2;  
System.out.println("The area of the triangle is: " + area);  
}  
}
```

```
class circle extends shape  
{  
    void printArea(int x, int y)  
    {  
        num1 = x;  
        num2 = y;  
        double area;  
        area = (3.14) * num1 * num2;  
        System.out.println("The area of the Circle is: " + area);  
    }  
}
```

```
class shape-main  
{  
    public static void main(String xx[])  
    {  
        int a, b, g;  
        Scanner ss = new Scanner(System.in);  
        rectangle r1 = new rectangle();  
        triangle t1 = new triangle();  
        circle c1 = new circle();  
        System.out.println("Please enter the length & breadth of Rectangle");  
        a = ss.nextInt();  
        b = ss.nextInt();  
        r1.printArea(a, b);  
    }  
}
```



OUTPUT:

```
C:\Users\Anagha\Desktop\OOJ>java shape_main  
please enter the length and breadth of rectangle  
5 10  
The area of the rectangle is : 50  
please enter the base and height of triangle  
6 3  
the are of the triangle is : 9.0  
please enter the radius of circle  
5  
the are of the circle is : 78.5
```