Lab-4 - 2/1/2024

Lab Program 4:

```
import java.util.Scanner;
class InputScanner
{
    Scanner s = new Scanner(System.in);
}
abstract class shape extends InputScanner
{
    int base;
    int height;
    abstract void printArea();
}
class Rectangle extends shape
{
    void printArea()
    {
        System.out.println("Area of Rectangle:" +
            (base * height));
    }
}
class Triangle extends shape
{
    void printArea()
    {
        System.out.println("Area of Triangle:" +
            ((base * height)/2));
    }
}
class Circle extends shape
{
```

```
class Circle extends Shape
{
    void printArea()
    {
        System.out.println("Area of Circle :" + (3.14*r*r));
    }
}
class MainClass
{
    static void input(Rectangle r, Triangle t, Circle c)
    {
        System.out.println("Enter the dimensions of the
        rectangle : length and breadth");
        r.base = r.s.nextInt();
        r.height = r.s.nextInt();
        System.out.println("Enter the dimensions of
        the triangle : base and height");
        t.base = t.s.nextInt();
        t.height = t.s.nextInt();
        System.out.println("Enter the dimension
        of the circle : radius");
        c.base = c.s.nextInt();
    }
    public static void main(String args[])
    {
        Rectangle r = new Rectangle();
        Triangle t = new Triangle();
        Circle c = new Circle();
        input(r, t, c);
        r.printArea();
        t.printArea();
        c.printArea();
    }
}
```

output:

Enter the dimensions of the rectangle
2 3
Enter the dimensions of the triangle
2 4
Enter the dimensions of the circle
3
Area of the rectangle = 6
Area of Triangle = 4
Area of circle = 28.259999999999998

Rev
21/1/2024