

AVIRATH HEGDE → IBM19C3195

#### LAB-4

```
import java.util.*;
```

```
abstract class shape
```

```
{
```

```
    int a;
```

```
    int b;
```

```
    abstract void printArea();
```

```
}
```

```
class Rectangle extends Shape
```

```
{
```

```
    Rectangle (int x, int y)
```

```
    {
```

```
        a = x;
```

```
        b = y;
```

```
    }
```

```
    void printArea()
```

```
    {
```

```
        System.out.println("Area is " + (a*b));
```

```
    }
```

```
}
```

```
class Triangle extends shape
```

```
{
```

```
    Triangle (int x, int y)
```

```
    {
```

```
        a = x;
```

```
        b = y;
```

```
    }
```

```
    void printArea()
```

```
    {
```

```
        System.out.println("Area is " + (a*b*0.5));
```

```
    }
```

```
}
```

```
class Circle extends Shape
```

```
{
```

```
    Circle (int x)
```

```
    {
```

```
        a = x
```

```
    }
```

```
    void printArea()
```

```
    {
```

```
        System.out.println("Area is" + (a * a * 3.14));
```

```
    }
```

```
}
```

```
class Lab4
```

```
{
```

```
    public static void main (String ss[])
```

```
    {
```

```
        int l, b, ba, h, ra;
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Enter the length and breadth of rectangle");
```

```
        l = sc.nextInt();
```

```
        b = sc.nextInt();
```

```
        Rectangle r = new Rectangle(l, b);
```

```
        r.printArea();
```

```
        System.out.println("Enter the base and height of triangle");
```

```
        ba = sc.nextInt();
```

```
        h = sc.nextInt();
```

```
        Triangle t = new Triangle(ba, h)
```

```
        t.printArea();
```

```
        System.out.println("Enter the radius of circle");
```

```
        ra = sc.nextInt();
```

```
        Circle c = new Circle(ra);
```

```
        c.printArea();
```

```
    }
```