

## lab program 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 Shapes

```
{  
    public static void main (String ss[])  
    {  
        int l, b, h, a;  
        Scanner sc = new Scanner (System.in);  
        System.out.println("enter the length & 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();

}

}