

LAB 4

1. WAP to calculate area implementing inheritance:

```
import java.util.*;
abstract class shape {
    double l, b, area1, area2, base, height, rad, area3;
    abstract void printarea();
}
class rectangle extends shape {
    rectangle(double a, double d)
    {
        d = a;
        b = d;
    }
    void printarea()
    {
        area1 = d * b;
        System.out.println("area of the rectangle is:"
            + area1);
    }
}
class triangle extends shape {
    triangle(double x, double y)
    {
        base = x;
        height = y;
    }
    void printarea()
    {
        area2 = 0.5 * height * base;
        System.out.println("area of triangle is:" + area2);
    }
}
```



```
class circle extends shape
```

```
{
```

```
    circle(double e)
```

```
    {
```

```
        rad = e;
```

```
    }
```

```
    void printarea()
```

```
    {
```

```
        area3 = 3.14 * rad * rad;
```

```
        System.out.println("area of circle is : " + area3);
```

```
    }
```

```
}
```

```
public class abc {
```

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

```
    {
```

```
        rectangle r = new rectangle(2.5, 3.5);
```

```
        triangle t = new triangle(2.0, 4.0);
```

```
        circle c = new circle(3.0);
```

```
        r.printarea();
```

```
        t.printarea();
```

```
        c.printarea();
```

```
    }
```

```
}
```