

Lab 4:

```
abstract class Shape  
{
```

```
    double num1, num2 ;
```

```
    abstract double printArea();  
}
```

```
class Rectangle extends Shape  
{
```

```
    Rectangle (double a, double b)  
    {
```

```
        num1 = a;
```

```
        num2 = b;
```

```
    }
```

```
    double printArea()
```

```
    {
```

```
        System.out.println("Area of the rectangle is:");
```

```
        return num1 * num2;
```

```
    }
```

```
}
```

```
class Triangle extends Shape  
{
```

```
    Triangle ( double a , double b )
```

```
{
```

```
    num1 = a;
```

```
    num2 = b;
```

```
}
```

```
double printArea() {
```

```
{
```

```
    System.out.println("Area of the triangle is:");
```

```
    return num1 * num2 / 2;
```

```
}
```

```
}
```

```
class Circle extends Shape
```

```
{
```

```
    Circle (double a)
```

```
{
```

```
    num1 = a;
```

```
}
```

```
double printArea()
```

```
{
```

```
System.out.println("Area of Circle is :");
```

```
return 3.14 * num1 * num1;
```

```
}
```

```
}
```

```
class Shapemain
```

```
{
```

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

```
{
```

```
Rectangle r = new Rectangle(10,10);
```

```
Triangle t = new Triangle(10,5);
```

```
Circle c = new Circle(5);
```

```
System.out.println(r.printArea());
```

```
System.out.println(t.printArea());
```

```
System.out.println(c.printArea());
```

```
}
```

```
}
```