

## Lab 4

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

```
abstract class shape
```

```
{  
    Scanner sc = new Scanner(System.in);  
    int a = 6, b = 4;
```

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

```
}
```

```
class rectangle extends shape {
```

```
    public int rect-area;
```

```
    void rectangle()
```

```
{  
        System.out.println("Area of rectangle");  
    }
```

```
    void printArea()
```

```
{
```

```
        rect-area = a * b;
```

```
        System.out.println("The area of rectangle is " + rect-area);
```

```
}
```

```
}
```

```
class triangle extends shape {
```

```
    double tri-area;
```

```
void print_area()
```

```
{
```

```
    tri_area = (0.5 * a * b);
```

```
    System.out.println("The area of triangle is " + tri_area);
```

```
}
```

```
}
```

```
class Circle extends Shape {
```

```
    double ci_area;
```

```
    void print_area()
```

```
{
```

```
    ci_area = (3.14 * a * a);
```

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

```
}
```

```
}
```

```
class Main
```

```
{
```

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

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

```
{
```

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

```
        r.print_area();
```

```
        Triangle t = new Triangle();
```

```
        t.print_area();
```

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

```
        c.print_area();
```

```
}
```