

Java lab program 4.

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

```
import java.lang.*;
```

```
abstract class Shape {
```

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

```
    int a1, a2;
```

```
    Shape() {
```

```
        System.out.println("Input 2 integer values: ");
```

```
        a1 = in.nextInt();
```

```
        a2 = in.nextInt();
```

```
    }
```

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

```
}
```

```
class Rectangle extends Shape {
```

```
    void printArea() {
```

```
        System.out.println("Rectangle: " + a1 * a2);
```

```
    }
```

```
}
```

```
class Triangle extends Shape {
```

```
    void printArea() {
```

```
        System.out.println("Triangle: " + (a1 * a2) / 2);
```

```
    }
```

```
}
```


class Circle extends Shape {

void printArea() {

System.out.println("Circle 1: " + (3.14 * a1 * a1));

System.out.println("Circle 2: " + (3.14 * a2 * a2));

}

}

class testAbstract {

public static void main (String [] args) {

Shape s;

s = new Rectangle();

s.printArea();

s = new Triangle();

s.printArea();

s = new Circle();

s.printArea();

}