

LAB 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("Area of Rectangle : " + a1*a2);
```

```
    }
```

```
}
```

```
class Triangle extends Shape {
```

```
    void printArea() {
```

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

```
    }  
}
```

```
class Circle extends Shape {  
    void printArea() {  
        System.out.println("Area of Circle : " + (3.14 * a1 * a1));  
    }  
}
```

```
class abstractclassexample {  
    public static void main(String[] args) {  
        Shape s;  
  
        s = new Rectangle();  
        s.printArea();  
  
        s = new Triangle();  
        s.printArea();  
  
        s = new Circle();  
        s.printArea();  
    }  
}
```

Input 2 integer values:

1 2

Area of Rectangle : 2

Input 2 integer values:

3 4

Area of Triangle : 6

Input 2 integer values:

5 6

Area of Circle : 78.5

(program exited with code: 0)

Press any key to continue . . .