

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

```
class InputScanner {
```

```
    Scanner sc;
```

```
    InputScanner() {
```

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

```
    }
```

```
}
```

```
abstract class Shape extends InputScanner {
```

```
    double a;
```

```
    double b;
```

```
    abstract void getInput;
```

```
    abstract void displayArea;
```

```
}
```

```
class Rectangle extends Shape {
```

```
    void getInput() {
```

```
        System.out.println("Enter the length and breadth:");
```

```
        a = sc.nextDouble();
```

```
        b = sc.nextDouble();
```

```
    }
```

```
    void displayArea() {
```

```
        System.out.println("Area of rectangle is : " + (a*b));
```

```
    }
```

```
}
```



```
class Triangle extends Shape {
```

```
void getInput() {
```

```
System.out.println("Enter the length and height:");
```

```
a = sc.nextDouble();
```

```
b = sc.nextDouble();
```

```
}
```

```
void displayArea() {
```

```
System.out.println("Area of rectangle
```

```
is: " + (a * a * 3.14));
```

```
}
```

```
}
```

```
class ShapeMain {
```

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

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

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

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

```
r.getInput();
```

```
r.displayArea();
```

```
t.displayArea();
```

```
c.getInput();
```

```
c.displayArea();
```

```
}
```

```
}
```



Output

enter length and breadth:

78

43

Area of rectangle is : 3354.0

enter length and breadth

43

323

Area of rectangle is : 6944.5

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Ans 23  
2-1-23