

Assignment 4:- (Dynamic Binding Area Of Rectangle And Triangle)

```
import java.util.*;

abstract class Shape
{
    double val1, val2;

    void input()
    {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter first value :");
        val1 = sc.nextDouble();

        System.out.println("Enter second value :");
        val2 = sc.nextDouble();
    }

    abstract void compute_area();
}

class Triangle extends Shape
{
    void compute_area()
    {
        double area;

        area = 1.0f/2.0f * val1 * val2;

        System.out.println("Triangle area :"+area);
    }
}

class Rectangle extends Shape
{
    void compute_area()
    {
        double area;

        area = val1 * val2;
    }
}
```

```
System.out.println("Rectangle area :"+area);
```

```
}
```

```
}
```

```
class Dynamic
```

```
{
```

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

```
{
```

```
Shape s;
```

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

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

```
s=t;
```

```
s.input();
```

```
s.compute_area();
```

```
s=r;
```

```
s.input();
```

```
s.compute_area();
```

```
}
```

```
}
```