

Week

DAYANAND

IBM19CS043

```
import java.util.Scanner;
```

```
abstract class shape
```

```
{ int d1, d2;
```

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

```
class rectangle extends shape
```

```
{ void printArea()
```

```
{ System.out.println("\n Area: " + (d1*d2)); }
```

```
}
```

```
class triangle extends shape
```

```
{ void printArea()
```

```
{ System.out.println("\n Area: " + (d1*d2/2)); }
```

```
}
```

```
class circle extends shape
```

```
{ void printArea()
```

```
{ System.out.println("\n Area: " + (3.14159*d1*d2)); }
```

```
}
```

```
class ShapeMain
```

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

```
{ int ch;
```

```
    triangle t = new triangle();
```

```
    rectangle r = new rectangle();
```

```
    System circle c = new circle();
```

```
    System.out.println("1. Rectangle\n 2. Triangle\n 3. Circle");
```



```
System.out.println("Enter the no. of choice");
```

```
ch = get.nextInt();
```

```
Switch (ch)
```

```
{ case 1 : System.out.println("\nEnter height and width");
```

```
    s.d1 = get.nextInt();
```

```
    s.d2 = get.nextInt();
```

```
    s.printarea();
```

```
    break;
```

```
case 2 : System.out.println("Enter altitude and base");
```

```
    t.d1 = get.nextInt();
```

```
    t.d2 = get.nextInt();
```

```
    t.printarea();
```

```
    break;
```

```
case 3 : System.out.println("Enter the radius");
```

```
    c.d1 = get.nextInt();
```

```
    c.d2 = get.nextInt();
```

```
    c.printarea();
```

```
    break;
```

```
default : System.out.println("Invalid input");
```

```
    y
```

```
    y
```

```
    y
```