

week

```
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: " + (3.1415926 * d1 * d2));
```

```
}
```

class Shape Main

{

public static void main (String args[]);  
int m;

Triangle t2 = new Triangle();

Rectangle r2 = new Rectangle();

Circle c = new Circle();

System.out.println("1. Rectangle in  
2. Triangle in  
3. Circle");

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

ch = get.nextInt();

switch (ch)

{

case 1: System.out.println("Enter  
height and width");

r.d1 = get.nextInt();

r.d2 = get.nextInt();

r.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.nextText();  
c.d2 = get.nextText();  
c.printArea();  
break;
```

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

q  
4  
3