Nested Loops

Nested simple if

```java
package com.kodnest.training.loop;

import java.util.Scanner;

public class SimpleIf {
    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);

        System.out.println("Enter the number");
        int number= scan.nextInt();

        if (number > 0) {
            if (number % 2 == 0) {
                if (number > 10) {

System.out.println("The number is positive, even, and greater than 10.");
                }
            }
        }


    }


}
```

```
Enter the number
```

```
12
The number is positive, even, and greater
than 10.
```

```
Enter the number
67
```

Nested if-else

```java
package com.kodnest.training.loop;

import java.util.Scanner;

public class NestedIfElse {
    public static void main(String[] args) {
        Scanner scan= new Scanner(System.in);
        System.out.println("Enter the gpa");
        float gpa= scan.nextFloat();
        System.out.println("Enter the extra
curricular activity points");
        int
extracurricularActivities=scan.nextInt();


        if (gpa >= 3.0) {
            if (extracurricularActivities >=
3) {

                System.out.println("The
student is eligible for the scholarship.");
            } else {
```

```java
                System.out.println("The
student is not eligible for the scholarship
due to insufficient extracurricular
activities.");
                }
        } else {
            System.out.println("The student
is not eligible for the scholarship due to
low GPA.");
        }
    }

}
```

```
Enter the gpa
3.5
Enter the extra curricular activity points
3
The student is eligible for the scholarship.
```

```
Enter the gpa
5
Enter the extra curricular activity points
2
The student is not eligible for the
scholarship due to insufficient
extracurricular activities.
```

Nested if-else

```java
package com.kodnest.training.loop;

import java.util.Scanner;

public class Nestedelseif {
    public static void main(String[] args) {
        Scanner scan= new Scanner(System.in);
        System.out.println("Enter the value
for side1, side2 and side3");
        int side1=scan.nextInt();
        int side2=scan.nextInt();
        int side3=scan.nextInt();

        if (side1 == side2 && side2 ==
side3)
        {
            System.out.println("The
triangle is equilateral.");
        }
        else
        {
            if (side1 == side2 || side2
== side3 || side1 == side3)
            {
                System.out.println("The
triangle is isosceles.");
            }
            else
```

```
                {
                    System.out.println("The
triangle is scalene.");
                }
            }
        }


}
```

```
Enter the value for side1, side2 and side3
3
5
7
The triangle is scalene.
```

```
Enter the value for side1, side2 and side3
3
3
8
The triangle is isosceles.
```

```
Enter the value for side1, side2 and side3
5
5
5
The triangle is equilateral.
```

Nested While Loop

```java
package com.kodnest.training.loop;

public class NestedWhile {
    public static void main(String[] args) {
        int num = 5;
        int i = 1;

        while (i <= 10) {
            int result = num * i;
            System.out.println(num + " * " +
i + " = " + result);
            i++;
        }
    }


}
```

```
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
```

Nested Do while Loop

```java
package com.kodnest.training.loop;

import java.util.Scanner;

public class NestedDoWhile {
    public static void main(String[] args) {
        Scanner scan= new Scanner(System.in);
        int sum = 0;
        int number;

        do {
            System.out.print("Enter a number (enter 0 to exit): ");
            number=scan.nextInt();
            sum += number;
        } while (number != 0);

        System.out.println("The sum of the numbers is: " + sum);
    }

}
```

```
Enter a number (enter 0 to exit):
5
Enter a number (enter 0 to exit):
7
Enter a number (enter 0 to exit): 0
```