

Assignment

G.Sathish

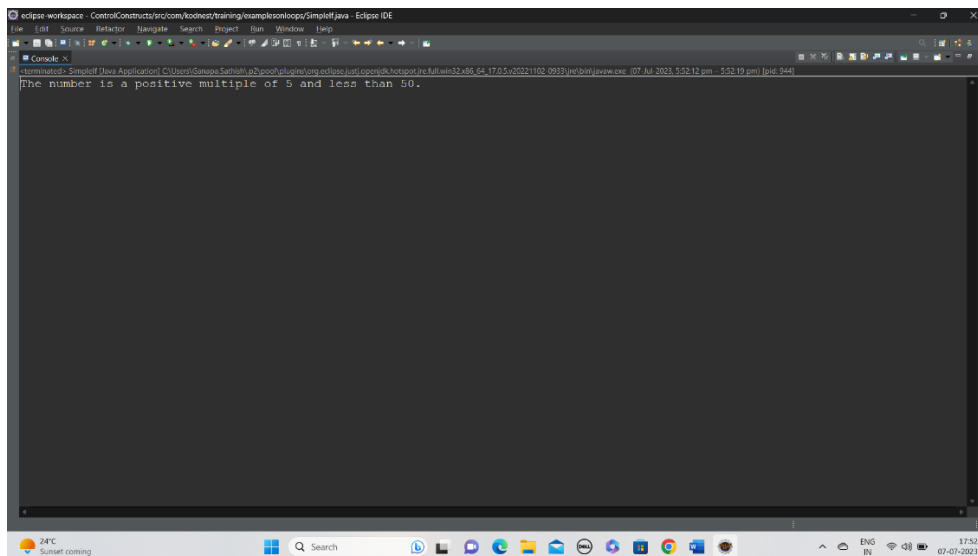
1)Is Nested Simple If permitted ?

A: Yes , Permitted

Example:

```
class SimpleIf {  
    public static void main(String[] args) {  
        int num = 25;  
        if (num > 0)  
        {  
            if (num % 5 == 0)  
            {  
                System.out.println("The number is a positive multiple of 5 and less  
than 50.");  
            }  
        }  
    }  
}
```

Output:



2) Is Nested if else permitted ?

A: Yes, Permitted

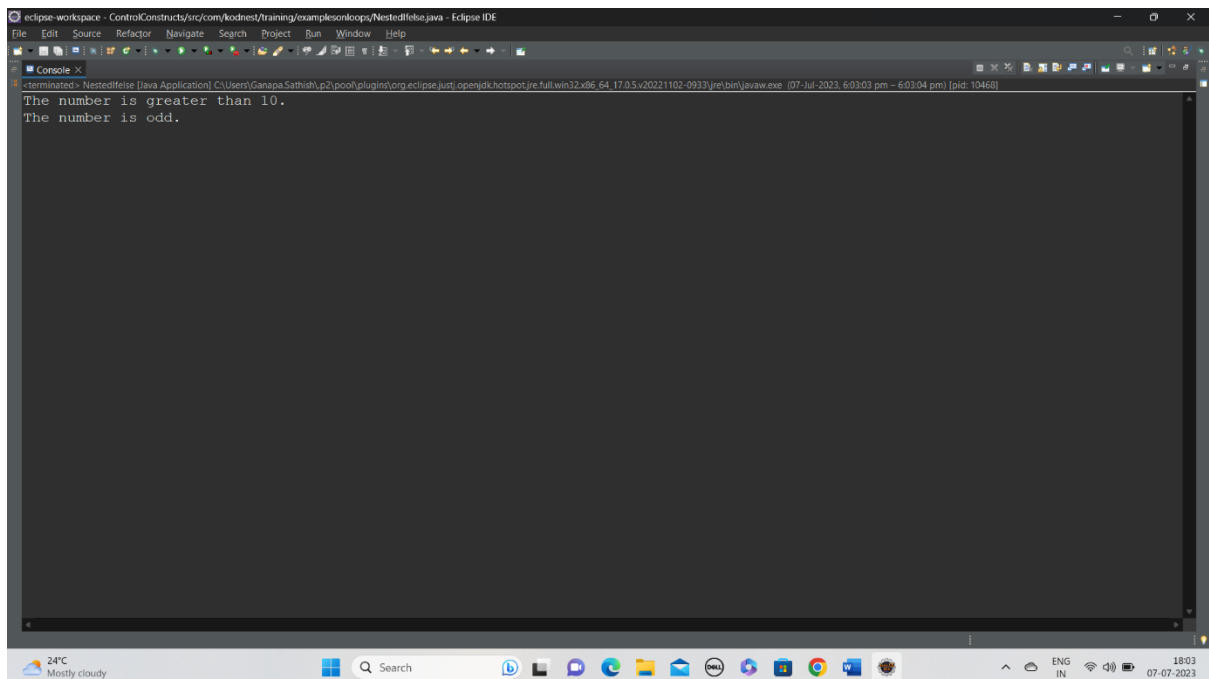
Example:

```
class NestedIfelse {  
    public static void main(String[] args) {  
        int num = 15;  
        if (num > 10)  
        {  
            System.out.println("The number is greater than 10.");  
  
            if (num % 2 == 0)  
            {  
  
                System.out.println("The number is even.");  
            }  
        }  
        else  
        {  

```

```
        System.out.println("The number is odd.");
    }
}
else
{
    System.out.println("The number is not greater than 10.");
}
}
}
```

Output:



The screenshot shows the Eclipse IDE interface. The title bar reads "eclipse-workspace - ControlConstructs/src/com/kodnest/training/samplesonloops/NestedIfElse.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The console window, titled "Console X", displays the following output:

```
terminated> NestedIfElse [Java Application] C:\Users\Ganapa.Sathish\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.5.v20221102-0937\jre\bin\javaw.exe. (07-Jul-2023, 6:03:03 pm - 6:03:04 pm) [pid: 10468]
The number is greater than 10.
The number is odd.
```

The Windows taskbar at the bottom shows the system clock as 18:03 on 07-07-2023, with a temperature of 24°C and the weather as "Mostly cloudy".

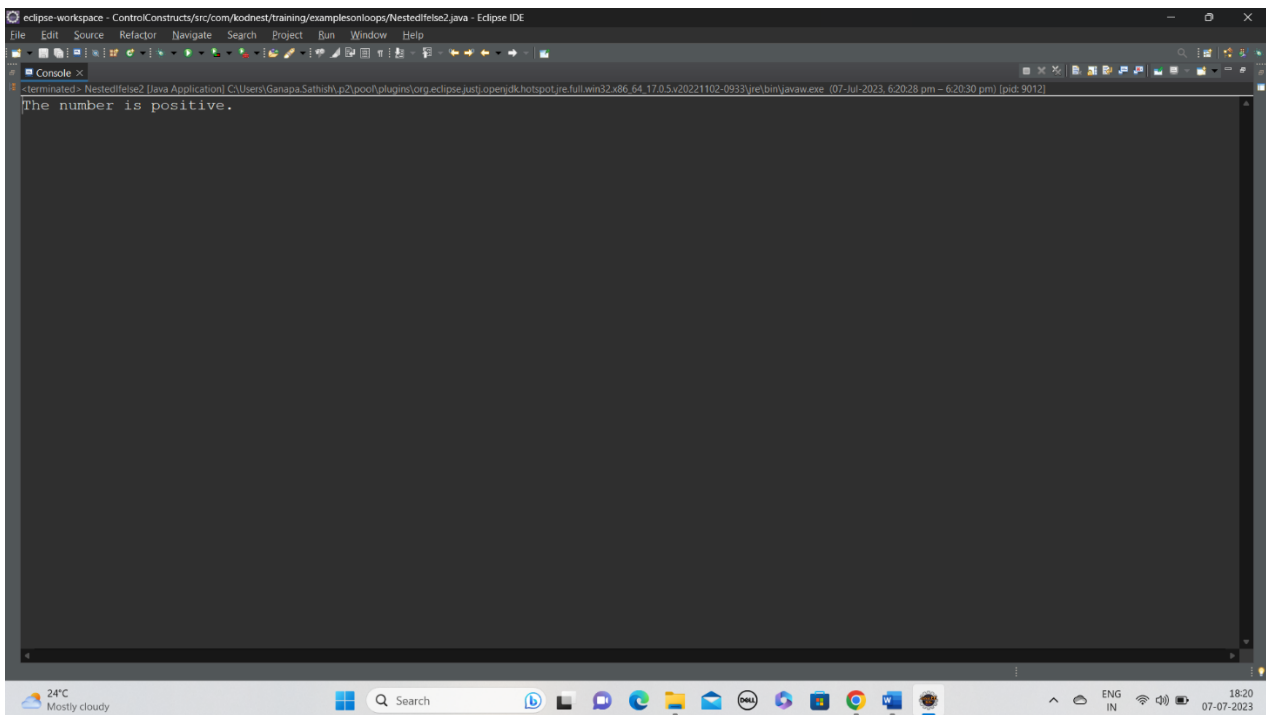
3) Is Nested if else permitted ?

A: Yes, Permitted

Example:

```
class NestedIfelse2 {  
  
    public static void main(String[] args) {  
        int num = 70;  
  
        if (num > 0)  
        {  
            System.out.println("The number is positive.");  
        }  
        else  
        {  
            if (num < 0)  
            {  
                System.out.println("The number is negative.");  
            } else  
            {  
                System.out.println("The number is zero.");  
            }  
        }  
    }  
}
```

Output:



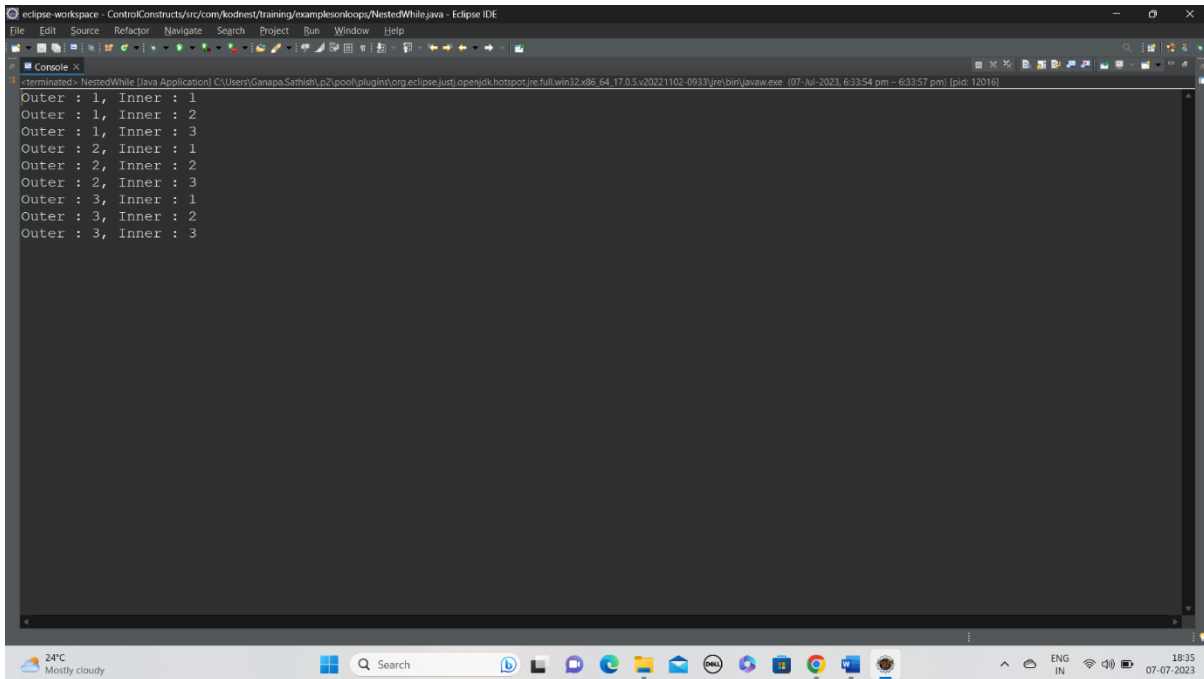
4.Nested While

Example:

```
class NestedWhile {  
    public static void main(String[] args) {  
        int outer = 1;  
        while (outer <= 3)  
        {  
            int inner = 1;  
            while (inner <= 3)  
            {  
                System.out.println("Outer : " + outer + ", Inner : " + inner);  
                inner++;  
            }  
            outer++;  
        }  
    }  
}
```

```
}  
}  
}
```

Output:



```
-terminated- NestedWhile [Java Application] C:\Users\Ganapa.Sathish\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.5.v20221102-0933\jre\bin\java.exe (07-Jul-2023, 6:33:54 pm - 6:33:57 pm) [pid: 12016]  
Outer : 1, Inner : 1  
Outer : 1, Inner : 2  
Outer : 1, Inner : 3  
Outer : 2, Inner : 1  
Outer : 2, Inner : 2  
Outer : 2, Inner : 3  
Outer : 3, Inner : 1  
Outer : 3, Inner : 2  
Outer : 3, Inner : 3
```

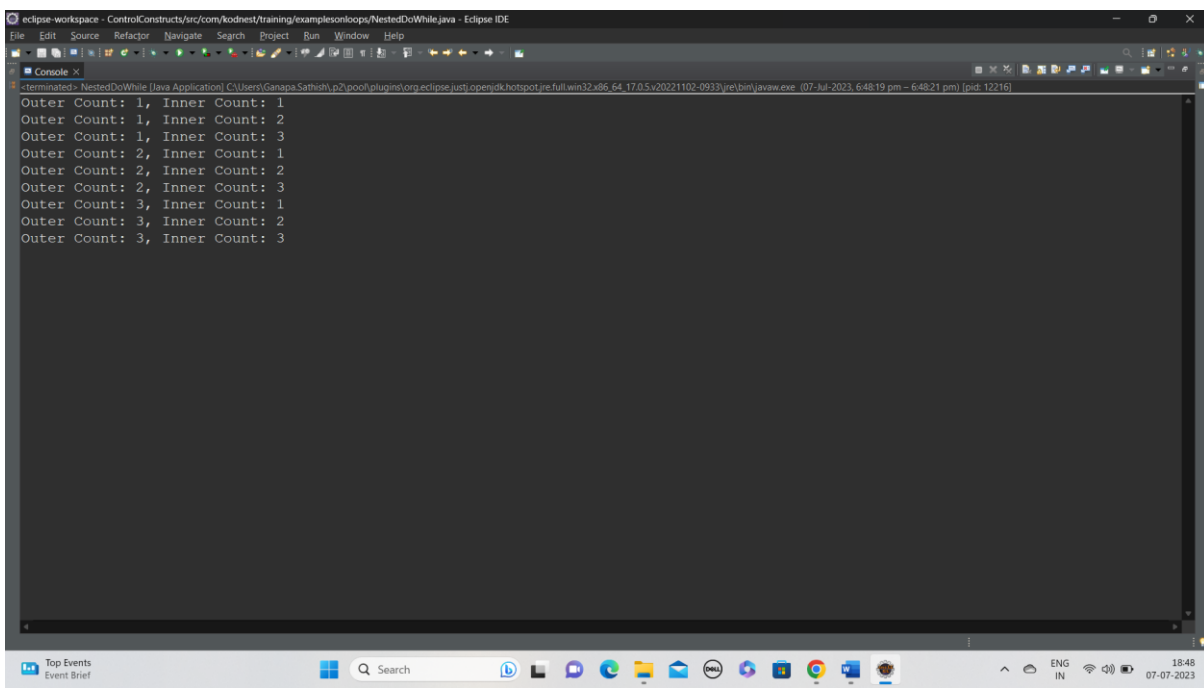
5. Nested Do While

Example:

```
class NestedDoWhile {  
    public static void main(String[] args) {  
        int outerCount = 1;  
        do  
        {  
            int innerCount = 1;  
            do {  
                System.out.println("Outer Count: " + outerCount + ", Inner Count: " +  
innerCount);
```

```
        innerCount++;  
    } while (innerCount <= 3);  
    outerCount++;  
} while (outerCount <= 3);  
  
}  
  
}
```

Output:



The screenshot shows the Eclipse IDE interface with the console window open. The console displays the output of a Java application named 'NestedDoWhile'. The output consists of 12 lines, each showing the 'Outer Count' and 'Inner Count' values. The counts range from 1 to 3 for both the outer and inner loops, resulting in a total of 12 iterations. The console text is as follows:

```
<terminated>- NestedDoWhile [Java Application] C:\Users\Ganapa Sathish\p2\pool\plugins\org.eclipse.just.openjdk.hotspot.jre.full.win32.x86_64.17.0.5.v20221102-0933\jre\bin\java.exe (07-Jul-2023, 6:48:19 pm - 6:48:21 pm) [pid: 12216]  
Outer Count: 1, Inner Count: 1  
Outer Count: 1, Inner Count: 2  
Outer Count: 1, Inner Count: 3  
Outer Count: 2, Inner Count: 1  
Outer Count: 2, Inner Count: 2  
Outer Count: 2, Inner Count: 3  
Outer Count: 3, Inner Count: 1  
Outer Count: 3, Inner Count: 2  
Outer Count: 3, Inner Count: 3
```