

JAVA ASSIGNMENT

1. Is Nested Simple-if permitted?

Ans. In Java, nested Simple-if allowed, which means you can have an 'if' statement inside another 'if' statement. This allows for more complex conditional branching in the code.

EXAMPLE:

```
package com.kodnest.training.loops;

public class NestedIf {

    public static void main(String[] args) {

        int num=10;

        if (num > 0) {

            System.out.println("Number is positive.");

            if (num % 2 == 0) {

                System.out.println("Number is even.");

                if (num > 10) {

                    System.out.println("Number is greater than 10.");

                }

            }

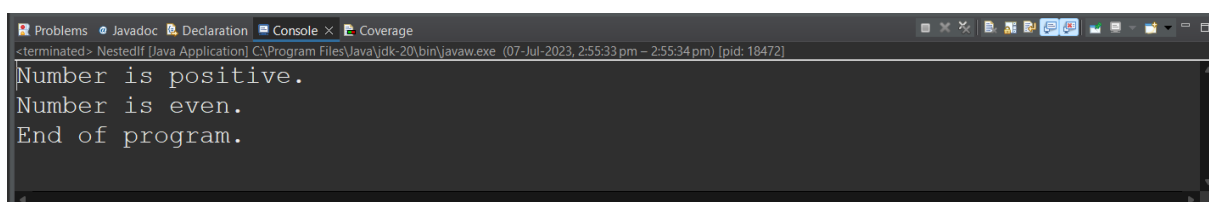
        }

        System.out.println("End of program.");

    }

}
```

OUTPUT



The screenshot shows an IDE window with a console tab. The console output is as follows:

```
<terminated> NestedIf [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (07-Jul-2023, 2:55:33 pm - 2:55:34 pm) [pid: 18472]
Number is positive.
Number is even.
End of program.
```

JAVA ASSIGNMENT

2. Is Nested if-else permitted?

Ans. In Java, nested if-else is allowed, which means you can have an 'if -else' statement inside another 'if' statement.

EXAMPLE:

```
package com.kodnest.training.loops;

import java.util.*;

public class NestedIfElse {

    public static void main(String[] args) {

        Scanner scan=new Scanner(System.in);

        System.out.println("Enter any number");

        int num = scan.nextInt();

        if(num>0) {

            System.out.println("Number is positive");

            if(num%2==0) {

                System.out.println("Number is even");

            }

            else {

                System.out.println("Number is odd");

            }

        }

        else {

            System.out.println("Number is negative");

        }

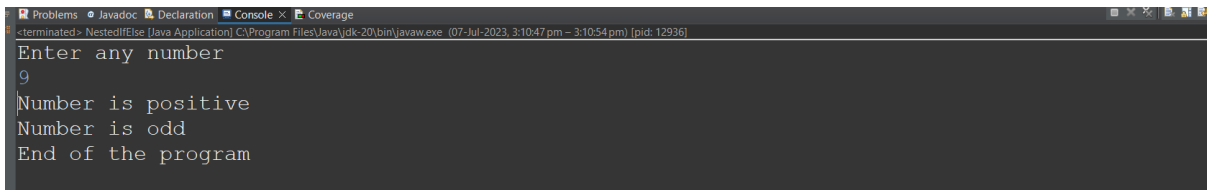
        System.out.println("End of the program");

    }

}
```

OUTPUT

JAVA ASSIGNMENT

A screenshot of a Java IDE's console window. The title bar shows 'Problems', 'Javadoc', 'Declaration', 'Console', and 'Coverage'. The console text reads: 'Enter any number', '9', 'Number is positive', 'Number is odd', and 'End of the program'. The status bar at the bottom indicates the application has terminated.

```
Enter any number
9
Number is positive
Number is odd
End of the program
```

3. Is Nested else-if permitted?

Ans. In Java, nested else-if allowed, which means you can have an '**if-else**' statement inside another '**else**' statement.

EXAMPLE:

```
package com.kodnest.training.loops;

public class NestedIfElse {

    public static void main(String[] args) {

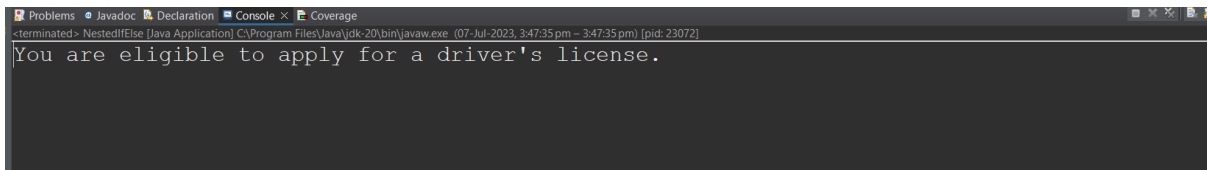
        int age = 25;

        boolean hasLicense = true;

        if (age >= 18) {
            System.out.println("You are eligible to apply for a driver's license.");
        }
        else {
            if (hasLicense) {
                System.out.println("You already have a driver's license.");
            }
            else {
                System.out.println("You are not eligible to apply for a driver's license.");
            }
        }
    }
}
```

OUTPUT:

JAVA ASSIGNMENT



4. Is Nested while loop permitted in java?

Ans. Yes, Nested while loops are allowed in java. You can have a '**while**' loop inside another '**while**' loop to create a nested loop structure.

EXAMPLE:

```
package com.kodnest.training.loops;

public class NestedWhile {

    public static void main(String[] args) {

        int rows = 5;
        int i = 1;

        while (i <= rows) {
            int j = 1;

            while (j <= i) {
                System.out.print(j + " ");

                j++;
            }

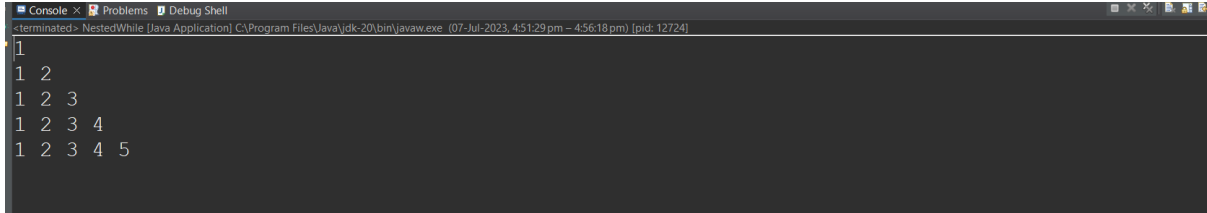
            System.out.println();

            i++;
        }
    }
}
```

JAVA ASSIGNMENT

```
}  
}
```

OUTPUT



```
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5
```

5. Is Nested do while loop permitted?

Ans. Yes, Nested do while loops are allowed in java. You can have a '**do while**' loop inside another '**do while**' loop to create a nested loop structure.

EXAMPLE:

```
package com.kodnest.training.loops;
```

```
public class NestedDoWhile {
```

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

```
        int rows = 5;
```

```
        int i = 1;
```

```
        do {
```

```
            int j = 1;
```

```
            do {
```

```
                System.out.print(j + " ");
```

```
                j++;
```

```
            } while (j <= i);
```

```
            System.out.println();
```

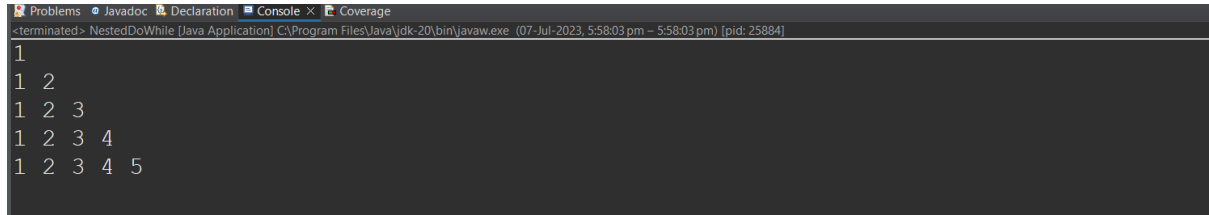
```
            i++;
```

```
        } while (i <= rows);
```

JAVA ASSIGNMENT

```
    }  
}
```

OUTPUT



```
<terminated> NestedDoWhile [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (07-Jul-2023, 5:58:03 pm - 5:58:03 pm) [pid: 25884]  
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5
```