

1. IS NESTED SIMPLE IF IS PERMITTED IN JAVA.?

YES. NESTED SIMPLE IF IS PERMITTED IN JAVA.

```
Syntax:
if(condition)
 //code
 If(condition)
   //code
}
EX:
import java.util.*;
public class NestedIf
     public static void main(String[] args)
           Scanner obj=new Scanner(System.in);
           System.out.println("Enter the number");
           int n=obj.nextInt();
           if(n>0)
                 if(n>=1 && n<=200)
                       if(n==150)
                             System.out.println("the movie is:
KHAIDI NUMBER 150");
                       else
                             System.out.println("ADIPURUSH");
                 }
           }
}
```

NESTED CONTROL CONSTRUCTS

FLOW OF EXECUTION:

The flow of execution goes in a way that condition 1 will get tested if it becomes false then, statement 3 will get executed. If the condition 1 gets satisfied i.e. if it gets true then it will go for the next execution of test condition 2.

2. IS NESTED IF -ELSE PERMITTED IN JAVA.?

A.)YES.NESTED IF ELSE IS PERMITTED IN JAVA.

Syntax:

```
If(condition)
{
    if(condition)
    {
        //code
      }
    else
      {
            //code
      }
}
else
//code
```

```
<u>Ex:</u>
import java.util.*;
public class NestedIf
      public static void main(String[] args)
            Scanner obj=new Scanner(System.in);
            System.out.println("Enter the number");
            int n=obj.nextInt();
            int x = 10;
            if (x > 0)
              System.out.println("x is positive");
               if (x \% 2 == 0)
                System.out.println("x is even");
                else
                  System.out.println("x is odd");
         }
         else
           System.out.println("x is not positive");
   }
}
```

3. IN ELSE BLOCK AN IF-ELSE STATEMENT IS PEMITTED IN JAVA .?

A.) Yes, an if-else statement can be nested inside the else block of another if-else statement in Java. This allows for more complex conditional branching.

EX:

```
import java.util.*;
public class NestedIf
      public static void main(String[] args)
            Scanner obj=new Scanner(System.in);
            int x = 10;
            if (x > 0)
              System.out.println("x is positive");
            else {
                  System.out.println("x is not positive");
                 if (x == 0) {
                      System.out.println("x is zero");
                   else {
                       System.out.println("x is negative");
                 }
    }
}
```

IS NESTED WHILE LOOP IS PERMITTED IN JAVA.?

A.) Yes, nested while loops are permitted in Java. You can have one or more while loops inside another while loop. This allows you to create more complex looping structures to handle various scenarios.

EX:-

```
import java.util.*;
public class NestedIf {
      public static void main(String[] args) {
            Scanner obj=new Scanner(System.in);
            int i = 1;
         while (i <= 3)
           System.out.println("Outer loop: " + i);
          int j = 1;
           while (j \le 2)
             System.out.println("Inner loop: " + j);
             j++;
          i++;
        }
    }
}
```

IS NESTED DO-WHILE LOOP IS PERMITTED IN JAVA.?

A.)Yes, nested do-while loops are permitted in Java. You can have one or more do-while loops inside another do-while loop. This allows you to create complex looping structures where the inner loop(s) are executed at least once before the outer loop condition is checked.

<u>EX:-</u>

```
import java.util.*;
public class NestedIf {
      public static void main(String[] args) {
            Scanner obj=new Scanner(System.in);
            int i = 1;
        do {
               System.out.println("Outer loop: " + i);
                int j = 1;
                do {
                    System.out.println("Inner loop: " + j);
                     j++;
                  \} while (i \le 2);
                  i++;
             \} while (i <= 3);
    }
}
```