

Day 14 – do-while Loop in Java

In this lesson, we will learn the do-while loop in Java. This loop executes the code at least once. Full code examples and practice questions are included.

1. What is a do-while Loop?

A do-while loop first executes the loop body and then checks the condition. So the loop runs at least once even if the condition is false.

Syntax of do-while loop:

```
initialization;
do {
    // statements
    increment/decrement;
} while(condition);
```

Statements inside do block run first. After that condition is checked. If condition is true, loop repeats.

2. do-while Loop Examples (Full Code)

Example 1: Print numbers from 1 to 5

```
class Example1 {
    public static void main(String[] args) {
        int i = 1;
        do {
            System.out.println(i);
            i++;
        } while(i <= 5);
    }
}
```

Example 2: Print even numbers from 1 to 10

```
class Example2 {
    public static void main(String[] args) {
        int i = 1;
        do {
            if(i % 2 == 0) {
                System.out.println(i);
            }
            i++;
        } while(i <= 10);
    }
}
```

Example 3: Print table of 5

```
class Example3 {
    public static void main(String[] args) {
        int n = 5;
        int i = 1;
        do {
            System.out.println(n + " x " + i + " = " + (n*i));
            i++;
        } while(i <= 10);
    }
}
```

Example 4: Sum of first 10 natural numbers

```
class Example4 {
    public static void main(String[] args) {
        int i = 1, sum = 0;
        do {
            sum = sum + i;
            i++;
        } while(i <= 10);
        System.out.println("Sum = " + sum);
    }
}
```

Example 5: Print numbers in reverse order

```
class Example5 {
    public static void main(String[] args) {
        int i = 10;
        do {
            System.out.println(i);
            i--;
        }
```

```
        } while(i >= 1);
    }
}
```

Example 6: Count numbers from 1 to 10

```
class Example6 {
    public static void main(String[] args) {
        int i = 1, count = 0;
        do {
            count++;
            i++;
        } while(i <= 10);
        System.out.println("Count = " + count);
    }
}
```

3. Practice Questions

1. Print numbers from 1 to 20 using do-while loop.
2. Print odd numbers between 1 and 50 using do-while loop.
3. Find factorial of a number using do-while loop.
4. Print multiplication table of any number using do-while loop.
5. Find sum of even numbers from 1 to 100 using do-while loop.
6. Print squares of numbers from 1 to 10 using do-while loop.
7. Reverse a number using do-while loop.

github.com/RohitKumar221