

Operator & Loops

Day 8 Assignment

1. What are the Conditional Operators in Java?
2. What are the types of operators based on the number of operands?
3. What is the use of Switch case in Java programming?
4. What are the priority levels of arithmetic operation in Java?
5. What are the conditional Statements and use of conditional statements in Java?
6. What is the syntax of if else statement?
7. What are the 3 types of iterative statements in java?
8. Write the difference between for loop and do-while loop?
9. Write a program to print numbers from 1 to 10.

1. What are the Conditional Operators in Java?

Ans: The conditional operator (? :) is a ternary operator (it takes three operands). The conditional operator works as follows:

- The first operand is implicitly converted to bool. It is evaluated and all side effects are completed before continuing.
- If the first operand evaluates to true (1), the second operand is evaluated.
- If the first operand evaluates to false (0), the third operand is evaluated.

The result of the conditional operator is the result of whichever operand is evaluated — the second or the third. Only one of the last two operands is evaluated in a conditional expression.

Conditional expressions have right-to-left associativity.

2. What are the types of operators based on the number of operands?

Ans: there are three (i.e unary, binary & ternary) types of operators based on the number of operands.

3. What is the use of Switch case in Java programming?

Ans: Use of Switch Case in Java

The switch case in java is used to select one of many code blocks for execution.

Break keyword: As java reaches a break keyword, the control breaks out of the switch block. The execution of code stops on encountering this keyword, and the case testing inside the block ends as the match is found. A lot of execution time can be saved because it ignores the rest of the code's execution when there is a break. **Default keyword:** The keyword is used to specify the code executed when the expression does not match any test case.

4. What are the priority levels of arithmetic operation in Java?

Ans: multiplication & division are higher priority than addition & subtraction. The associativity between multiplication & division is left to right. & also the associativity between addition & subtraction is left to right.

5. What are the conditional Statements and use of conditional statements in Java?

Ans: Java has the following conditional statements:

- **If** - to specify a block of code to be executed, if a specified condition is true
- **else** - to specify a block of code to be executed, if the same condition is false
- **else if** - to specify a new condition to test, if the first condition is false
- **switch** - to specify many alternative blocks of code to be executed

6. What is the syntax of if else statement?

Ans:

```
if(expression)
{
    //execute for true expression}
else
{
    //execute for false expression
}
```

7. What are the 3 types of iterative statements in java?

Ans: for loop, while loop & do while loop

8. Write the difference between for loop and do-while loop?

Ans: do while is pre tested loop while for is tested loop.

9. Write a program to print numbers from 1 to 10.

Ans:

```
public class Main
{
    public static void main(String[] args)
    {
        for(int i=1; i<=10; i++)
            System.out.println(i);
    }
}
```