# **Operators and Loops**

#### 1. What are conditional operators in Java?

In Java, conditional operators check the condition and decides the desired result on the basis of both conditions.

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

Types of Operators in Java:

Java supports many operators just like C and C++. Operators are divided into 3 categories depending upon the number of operands they work on.

- Unary Operator
- It operates on only 1 operand
- For example: ++, -, !, ~
- Binary Operators
- It operates on 2 operands
- For example: &&, %, /, ||
- Conditional/Ternary Operator
- It operates on 3 operands

# 3. What is the use of switch case in Java Programming?

A switch statement allows a variable to be tested for equality against a list of values. Each value is called a case, and the variable being switched on is checked for each case.

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

Operator	Precedence
postfix	expr++ expr
unary	++exprexpr +expr -expr ~!
multiplicative	* / %
additive	+-
shift	<< >> >>>
relational	<><=>=
instanceofequality	== !=
bitwise AND	&
bitwise exclusive OR	۸
bitwise inclusive OR	
logical AND	&&
logical OR	11
ternary	?:
	= += -= *= /= %= &= ^=  = <<= >>=
assignment	>>>=

#### 5. What are conditional statements & use of conditional statements in Java?

Conditional statements are mostly used in decision-making scenarios which means these statements take a decision on the basis of some conditions. The conditional statements are also referred as branching statements because the program takes a decision based on the result of the assessed condition.

## 6. What is the syntax of if else statement?

```
if (condition) {
  // block of code to be executed if the condition is true
} else {
  // block of code to be executed if the condition is false
}
```

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

The java programming language provides a set of iterative statements that are used to execute a statement or a block of statements repeatedly as long as the given condition is true. The iterative statements are also known as looping statements or repetitive statements. Java provides the following iterative statements.

- while statement
- do-while statement
- for statement
- for-each statement

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

for loop provides a concise way of writing the loop structure. Unlike a while loop, a for statement consumes the initialization, condition and increment/decrement in one line thereby providing a shorter, easy to debug structure of looping.

do while loop is similar to while loop with the only difference that it checks for the condition after executing the statements.

#### 9. Write a Program to print numbers from 1 to 10?

#### **Public class Numbers**

```
{
public static void main(String[] args)
{
    for (int i=0; i<=10;i++)
    {
       System.out.println(i);
    }
}</pre>
```