

Q1. What are the Conditional Operators in Java?

Ans. Conditional Operators in Java are used when a condition consists of more than one boolean expression. For example if we want to print numbers greater than 2 and less than 10, then we write conditions like this (Number>2 && Number<10).

Types of Conditional operators are:

- >Logical AND operator(&&)
- >Logical OR operator(||)
- >Ternary operator(condition ? true part : false part)

Q2. What are the types of operators based on the number of operands?

Ans. The types of operators based on the number of operands:

Unary Operator: This takes only single operands for the operation to be performed eg. increment(++) and decrement(--) operators.

Binary Operator: Operators which take two operands to evaluate an expression eg. Arithmetic operators, relational operators etc.

Ternary operator: It takes three operands for expression evaluation. It is a smaller version of the if-else statement.

Syntax: (CONDITION) ? (TRUE PART) : (FALSE PART)

Q3. What is the use of Switch case in java programming?

Ans. Switch case is used when we want to perform multiple operations on a variable. Based on what value the variable is storing. **For the switch value must be integer and since java 7 we use strings in the switch statement.**

SYNTAX:

```
switch(expression)
{
    case x: //code
        break;
    case y: //code
        break;
    default: //code
}
```

The case value must be literal or constant, and must be unique.

Q4. What are the priority levels of arithmetic operation in java?

Ans. The priority levels of arithmetic operation in java from higher order to lower order show below:

-> Multiplication, division, and modulo operations have precedence over addition and subtraction operations.

-> Plus and minus operators have the same precedence. Operators with the same precedence are evaluated from left to right.

Arithmetic operation (higher to lower order)	Associativity
Multiplication, division, and modulo operations	Left to right
Addition, Subtraction	Left to right

Q5. What are the conditional Statements and use of conditional statements in Java?

Ans. The 4 conditional statements in java are:

IF Statement

This conditional statement is used when we encounter a condition, if the condition is true then only we perform certain action as per the condition.

syntax:

```

    if(condition)
    {
    statement;
    }

```

IF-ELSE STATEMENT

When we need to perform 2 types of action i.e. **if** condition is true perform action 1 or statement 1 **else** perform action 2 or statement 2.

syntax:

```

    if(condition)
    {
    Statement 1;
    }
    else
    {
    Statement 2;
    }

```

IF-ELSE IF STATEMENT

It works similar to if-else statements, except here we have multiple conditions to be undertaken.. If the condition inside the if block is true, then a code/ statement is executed, but if it is false, it moves to the else-if block and will check if it is true and will execute the statement in the else-if block. But when the condition in this block is false, it will execute the statement in the final else block.

Syntax:

```

    if (condition - 1)
    {
    statement - 1 }
    else if (condition - 2)
    {

```

```
statement - 2 }  
else {  
statement 3 }
```

SWITCH CASE STATEMENT

Switch case is used when we want to perform multiple operations on a variable. Based on what value the variable is storing. **For the switch value must be integer and since java 7 use strings in the switch statement.** The case value must be literal or constant, and must be unique.

Syntax:

```
switch(expression)  
{  
case x: //code  
break;  
case y: //code  
break;  
default: //code  
}
```

Use Of Conditional Statements In Java

A conditional statement tells a program to execute an action depending on whether a condition is true or false. It is often represented as an if-then or if-then-else statement.

Q6. What is the syntax of if else statement?

Ans. The syntax of if else statement is:**syntax:**

```
if(condition)  
{  
Statement 1;  
}  
else  
{  
Statement 2;  
}
```

if condition is true perform statement 1 **else** perform statement 2.

Q7. What are the 3 types of iterative statements in java?

Ans. The 3 types of iterative statements in java are:

- 1.The while loop
- 2.The do-while loop
- 3.The for loop

Q8. Write the difference between for loop and do-while loop?

For loop	Do-while loop
Statement is executed once the condition is checked	Statement is executed before condition checked
Statement might executed zero times	Statement definitely execute one time here
Syntax: for(initialization;condition;updatation) { Statement; }	Syntax: do { Statement; }(condition);

Q9. Write a program to print numbers from 1 to 10?

Ans.

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

Output:

```
1
2
3
4
5
6
7
8
9
10
```