# 1. What are the conditionals operators in Java?

Conditional operators check the condition and decides the desired result on the basis of both conditions. Types of conditional operators:

<u>Conditional AND(&&)</u>:The operator is applied between two boolean expressions and it returns true if and only if both expressions are true, else return false.

<u>Conditional OR(||)</u>:The operator is applied between two boolean expressions and it returns true if any of the expressions is true,else return false.

<u>Ternary Operator</u>: The ternary operator (? :) consists of three operands. It is used to evaluate Boolean expression. The operator decides which value will be assigned to the variable. It is the only conditional operator that accepts three operands. It can be used instead of the if else statement.

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

There are two types of operators based on the number of operands:

Unary arithmetic operators perform an action on a single operand and on the other hand Binary operators perform action with two operands.

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

Switch case in Java executes one statement from multiple conditions. Some of rules to remember are:

- a) There can be any number of cases just imposing condition checks but remember duplicate cases values are not allowed.
- b) The value for a case must be of the same data type as the variable in the switch.
- c) The value for a case must be constant or literal.
- d) The break statement is used inside the switch to terminate a statement sequence.
- e) The break statement is optional. If omitted execution will continue on into the next case.
- f) The default statement is optional and can appear anywhere inside the switch block.

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

The priority levels of arithmetic operation is PEMDAS as it stands for Parentheses, Exponents, Multiplication/Division, Addition/Subtraction.

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

Conditional Statements come under Control Structure in Java. It controls the flow of the Execution of the program. Conditional statements are the executable block of code dependent on certain conditions.

<u>If statement</u>:If a statement executes a set of statements based upon certain conditions. The condition statement follows the if keyword. The if clause accepts a condition and executes the set of statements falling under it only when the condition evaluated is true. <u>If else statement</u>:It is control structure that selects or chooses a set of statements Depending upon certain conditions. Here the if clause evaluates the expression. If it

Comes out as true statements under if block gets executed. Else statements under the else block get executed.

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

```
if(condition)
{
  //Statements to be executed if condition satisfies
}
else
{
  //Statements to be executed
}
```

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

While statement in Java: It is used to execute a single statement or block of statements repeatedly as long as the given condition is True. The while statement is also known as entry control looping statement.

<u>Do-while statement in Java</u>:It is used to execute a single statement or block of statements repeatedly as long as the condition is True.The do while statement is also known as the exit control looping statement.

<u>For statement in Java</u>: The for statement is used to execute a single statement or block of statements repeatedly as the given condition is True. In for statement the execution begins with the initialization statement. After the initialization statement it executes condition. If the condition is evaluated to true then the block of statements executed otherwise it terminates the for statement. After the block of statements execution the modification statements gets executed followed by conditional again.

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

The do while loop executes the statements in the loop first before checking for the condition.At Least one iteration takes place, even if the condition is false and on other hand for loop checks for the condition first so it may not even enter into the loop, if the condition is false.

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

```
Public class Main
{
Public static void main(String[] args)
{
for(int i=0;i<=10;i++)
{
System.out.println(i);
}
}
```