1. What are the conditional Operators in Java?

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

There are three types of the conditional operator in Java:

- ➤ Logical/Conditional AND
- > Logical/Conditional OR
- > Ternary Operator

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

Answer: An operator is a symbol that performs a specific operation on one, two, or three operands, producing a result

Number of operands - There are three types of operators based on the number of operands. An operator is called a unary, binary, or ternary operator based on the number of operands. If an operator takes one operand, it is called a unary operator; if it takes two operands, it is called a binary operator; if it takes three operands, it is called a **ternary operator**.

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

Answer: Let's say we have a variable. Now we want to do multiple operations on it based upon what value it is storing. In Such cases the switch statement comes into play..

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

- 1) Any operation enclosed in parentheses are performed first.
- 2) Then, any multiplication and division operations are performed from left to right.
- 3) In the end, any addition and subtraction operations are performed from left to right.

Arithmetic Operators: [+, -, *, /, %] High Priority left to right. ('+/- '<< '*or/' << %)

5. What are the conditional Statement and use of conditional statement in Java?

Answer: Java has the following conditional statements:

 Use if to specify a block of code to be executed, if a specified condition is true

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

Use: Java Conditional statement are use for checking the conditions and provide a valid output. In the if-else statement if the condition is true then if-block will be executed and if the condition is false then the else-block will be execute.

6. What is the syntax of if else statement? Answer:

```
if (condition) {
      // statement/body-1
}
else {
      // statement/body-2
}
```

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

Answer: In Java we have 3 types of iterative statement.

- 1) The while loops
- 2) The for loop
- 3) The do-while loop

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

For loop	While loop
Initialization may be either in loop statement or outside the loop.	Initialization is always outside the loop.

For loop	While loop
Once the statement(s) is executed then after increment is done.	Increment can be done before or after the execution of the statement(s).
It is normally used when the number of iterations is known.	It is normally used when the number of iterations is unknown.
Condition is a relational expression.	Condition may be expression or non-zero value.
It is used when initialization and increment is simple.	It is used for complex initialization.
For is entry controlled loop.	While is also entry controlled loop.
<pre>for (init ; condition ; iteration) { statement(s); }</pre>	while (condition) { statement(s); }
used to obtain the result only when number of iterations is known.	used to satisfy the condition when the number of iterations is unknown

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

Answer:

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

