Q. what are the conditional operators in java?

1. **Conditional Operators in Java: **

Java has the following conditional operators:

```
- Equality: `==`
```

- Inequality: `! =`
- Greater than: `>`
- Less than: `<`
- Greater than or equal to: `>=`
- Less than or equal to: `<=`

Q. what are the types of operators based on the number of operands?

- 2. **Types of Operators based on the Number of Operands: **
 - Unary Operators: Operate on one operand (e.g., ++, --)
 - Binary Operators: Operate on two operands (e.g., +, -, *, /)
 - Ternary Operator: Operates on three operands (e.g.?:)

What is the use of switch case in java programming?

3. **Use of Switch Case in Java Programming: **

The `switch` statement in Java is used for multi-way branch control. It evaluates an expression and executes the case whose value matches the evaluated expression. It provides an alternative to multiple `if-else` statements.

What are the priority levels of arithmetic operations in java?

4. **Priority Levels of Arithmetic Operations in Java: **

The priority levels of arithmetic operations in Java follow the PEMDAS/BODMAS rule:

- Parentheses
- Exponents
- Multiplication and Division (left to right)
- Addition and Subtraction (left to right)

What are the conditional statements and use of conditional statements in java?

5. **Conditional Statements and Use in Java: **

Conditional statements in Java include:

- `if`: Executes a block of code if a given condition is true.
- `else`: Executes a block of code if the `if` condition is false.
- `else if`: Used for multiple conditional branches.

What is the syntax of if else statement?

```
6. **Syntax of if-else Statement: **
    ```java
 if (condition) {
 // code to be executed if the condition is true
 } else {
 // code to be executed if the condition is false
 }
 ...
```

## What are the three types of iterative statement in java?

- 7. \*\*Three Types of Iterative Statements in Java: \*\*
  - `for` loop
  - `while` loop
  - `do-while` loop

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

- 8. \*\*Difference Between for Loop and do-while Loop: \*\*
  - `for` loop is entry-controlled, and the loop variable is initialized, tested, and updated in a single line.
- `do-while` loop is exit-controlled, and the condition is evaluated after the loop body, guaranteeing the execution of the loop body at least once.

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

```
}
}
...
```

This simple program uses a `for` loop to iterate from 1 to 10 and prints the numbers.