

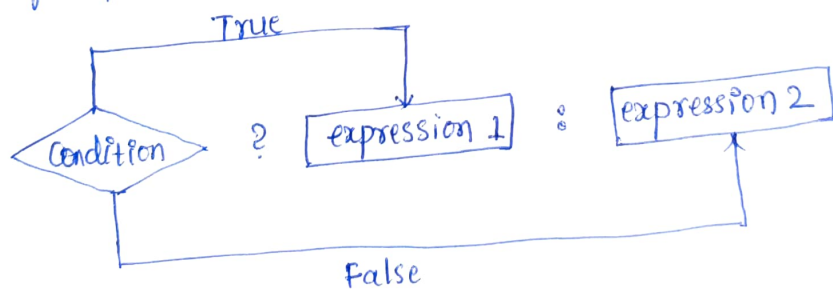
Q1. What are the conditional operators in java?

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.

Operator	Symbol
Conditional / Logical AND	&&
Conditional / Logical OR	
Ternary Operator	?:

- * Conditional AND : It returns true if and only if both expressions are true, else returns false.
- * Conditional OR : It returns false if and only if both expressions are false, else returns true.
- * Ternary Operator : It is used to evaluate boolean expressions.



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

Operators in java are the symbols used for performing specific operations in java.

Types of operators in java are;

1. Arithmetic operators

* : Multiplication

/ : Division

% : Modulo

+ : Addition

- : Subtraction

2. Unary Operators

- : Unary Minus

+ : Unary plus

++ : Increment operator

- post-increment
- pre-increment

-- : Decrement operator

- post-decrement
- pre-decrement

! : logical not operator

3. Assignment operator : =

compound assignment operator or compound statement :

+=

-=

*=

/=

%=

4. Relational Operators

`==` Equal to

`!=` Not equal to

`<` less than

`<=` less than or equal to

`>` greater than

`>=` greater than or equal to

5. Logical operators

`&&` Logical AND

`||` Logical OR

`!` Logical NOT

6. Ternary operators

condition ? if true : if false

7. Bitwise operators

`&` Bitwise AND

`|` Bitwise OR

`^` Bitwise XOR

`~` Bitwise Complement

8. Shift Operator

`<<` left shift operator

`>>` Signed Right shift operator

`>>>` Unsigned Right Shift Operator.

9. Instance of operator.

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

The switch statement is multiway branch statement

It provides an easy way to dispatch execution to different parts of code based on the value of the expression

Q4. What are the conditional statements and use of conditional statements in java?

Conditional statements in java are used to make decisions based on certain conditions. The most common conditional

statements in java are : If-else statement, switch statement &

ternary operator. These statements allow the program to execute different blocks of code based on specific conditions

Q5. What is the syntax of if else statement?

```
if (Boolean Expression)
```

```
{
```

execute the code when Boolean Expression is true

```
}
```

```
else
```

```
{
```

execute the code.

```
}
```

Q6. How do you compare two strings in java?

In java String equals() method compares the two given

strings based on the content of the string. If all the contents of both the strings are same then it returns true. If any character doesn't match, then it returns false

1. What is Mutable String in java Explain with an example?

Mutable strings are those strings whose content can be changed without creating a new object.

StringBuffer and StringBuilder are mutable versions of String in java.

Q8. Write a program to sort a String Alphabetically.

```
import java.util.*;
```

```
public class Main
```

```
{
```

```
    public static void main (String [] args)
```

```
    {
```

```
        String str;
```

```
        Scanner sc = new Scanner (System.in);
```

```
        System.out.println ("Enter the string");
```

```
        str = sc.nextLine();
```

```
        int j=0;
```

```
        char temp = 0;
```

```
        char [] charArr = str.toCharArray();
```

```
        int size = charArr.length;
```

```
        for (int i=0; i < size; i++) {
```

```
            for (j=i+1; j < size; j++) {
```

```
                if (charArr[i] > charArr[j]) {
```

```
                    temp = charArr[i]
```

```
                    charArr[i] = charArr[j];
```

```
                    charArr[j] = temp;
```

```
                }
```

```
            }
```

```
        }
```

```
System.out.println("The sorted String is");
```

```
for (int i=0; i<size; i++)
```

```
{  
    System.out.println(char[i]);
```

```
}
```

```
}
```

```
}
```

Q9. Write a program to check if the letter 'e' is present in the word 'Umbrella'.

```
class Check
```

```
{
```

```
    public static void main (String[] args).
```

```
{
```

```
    String str = "Umbrella";
```

```
    boolean present = false;
```

```
    for (int i=0; i<str.length(); i++)
```

```
    {
```

```
        if (str.charAt[i] == 'e')
```

```
        {
```

```
            present = true;
```

```
            break;
```

```
        }
```

```
    }
```

```
    System.out.println("Is letter 'e' present?" + present);
```

```
}
```

```
}
```

10. Where exactly is the string constant pool located in the memory?

The java string constant pool is an area in heap memory where java stores literal string values. The heap is an area of memory used for runtime operations. When a new variable is created and given a value, java checks to see if that exact value exist in the pool.