Q1. What are the Conditional Operators in Java?

Ans : The conditional logical OR operator || , also known as the "short-circuiting" logical OR operator, computes the logical OR of its operands. The result of x || y is true if either x or y evaluates to true . Otherwise, the result is false

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

Ans : 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.

Operators in Java can be classified into 5 types:

* Arithmetic Operators.
* Assignment Operators.
* Relational Operators.
* Logical Operators.
* Unary Operators.
* Bitwise Operators.

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

Ans : The switch case in java is used to select one of many code blocks for execution. Break keyword: As java reaches a break keyword, the control breaks out of the switch block. The execution of code stops on encountering this keyword, and the case testing inside the block ends as the match is found.

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

Ans : Conditional statements in Java are used to make decisions based on certain conditions. The most common conditional statements in Java are the If-Else statement, the Switch statement, and the 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?

Ans : An if statement can be followed by an optional else statement, which executes when the Boolean expression is false.

Syntax

Following is the syntax of an if...else statement −

if(Boolean\_expression) {

// Executes when the Boolean expression is true

}else {

// Executes when the Boolean expression is false

}

If the boolean expression evaluates to true, then the if block of code will be executed, otherwise else block of code will be executed.

Q6. How do you compare two strings in Java?

Ans : We can compare String in Java on the basis of content and reference.

It is used in authentication (by equals() method), sorting (by compareTo() method), reference matching (by == operator) etc.

There are three ways to compare String in Java:

1. By Using equals() Method
2. By Using == Operator
3. By compareTo() Method

Q7. What is Mutable String in Java Explain with an example?

Ans : Therefore 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, whereas the java String class is immutable. Immutable objects are those objects whose contents cannot be modified once created.

1. public class Example {
2. private String s;
3. Example(String s) {
4. this.s = s;
5. }
6. public String getName() {
7. return s;
8. }
9. public void setName(String coursename) {
10. this.s = coursename;
11. }
12. public static void main(String[] args) {
13. Example obj = new JExample("JavaTpoint");
14. System.out.println(obj.getName());
15. // Here, we can update the name using the setName method.
16. obj.setName("Java Training");
17. System.out.println(obj.getName());
18. }
19. }

Q8. Write a program to sort a String Alphabetically ?

Ans :

import java.util.Arrays;

import java.util.Scanner;

public class SortingString {

   public static void main(String args[]) {

      Scanner sc = new Scanner(System.in);

      System.out.println("Enter a string value: ");

      String str = sc.nextLine();

      char charArray[] = str.toCharArray();

      Arrays.sort(charArray);

      System.out.println(new String(charArray));

   }

}

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

Ans :

public class CheckLetter{

public static void main(String[] args){

String str = "Umbrella";

boolean pre = false;

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

if(str.charAt(i) == 'e'){

pre=true;

break;

}

}

System.out.println(pre);

}

}

Q10. Where exactly is the string constant pool located in the memory?

Ans : 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 run-time operations. When a new variable is created and given a value, Java checks to see if that exact value exists in the pool.