

Q1. What are the Conditional Operators in Java?

Ans: It is ternary operator which check condition if condition is true then first statement is executed else second statement is executed.

It is one line statement.

```
variable = (condition) ? expressionTrue : expressionFalse;
```

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

Ans: There are 3 types of operands on behalf of operands:

1.Unary Operator: which work among with 1 operand.(Increment/Decrement).

2.Binary Operator: which work among with two operands.(Arithmetic/Relational).

3.Ternary Operator: which work among with 3 operands.(Conditional)

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

Ans: The Java *switch statement* executes one statement from multiple conditions

```
switch(expression){
```

```
case value1:
```

```
//code to be executed;
```

```
break; //optional
```

```
case value2:
```

```
//code to be executed;
```

```
break; //optional
```

```
default:
```

```
//code to be excuted  
}
```

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:

```
If(condition){  
    //statement to be executed;  
}  
Else if(condition){  
    //statement to be executed;  
}  
Else{  
    //statement to be executed;  
}
```

Q6.How do you compare two strings in Java?

Ans: In Java, string equals() method compares the two given strings based on the data/content of the string. If all the contents of both the strings are same then it returns true. If any character does not match, then it returns false.

Ex: str1.equals(str2);

Or many methods such as ==,compareTo,ignoreCase,toLowerCase these also used for two string comparision.

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

Ans: 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.

Ex:-

```
StringBuffer str1 = new StringBuffer("JavaGoal");
StringBuilder str2 = new StringBuilder("Learning");
str1.append(".com");
str2.append(" website");
System.out.println("Value of str1 after change :" + str1);
System.out.println("Value of str2 after change :" + str2);
```

Q8. Write a program to sort a String Alphabetically

Ans:

```
import java.io.*;
import java.util.Arrays;
class sort{
public static void main(String[] args) throws Exception
{
String str = "rohitkumar";
char arr[] = str.toCharArray();
char temp;

int i = 0;
while (i < arr.length) {
int j = i + 1;
while (j < arr.length) {
if (arr[j] < arr[i]) {
temp = arr[i];
arr[i] = arr[j];
arr[j] = temp;
}
j += 1;
}
i += 1;
```

```
}  
        System.out.println(arr);  
}  
}
```

Output: ahikmorrtu

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

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```
Ans: public class Sample {  
    public static void main(String args[]){  
        String str = "Umbrella";  
        System.out.println(str.contains("e"));  
    }  
}
```

Output: true

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

Ans: Heap Memory Area.