1. **List the Operators in java ?**

Ans- there is a different types of operators in java, we use different types of symbol to denote them

- Arithmetic Operators: In Arithmetic operators of java we use to perform addition, subtraction, multiplication, division, modulus(%).
- Assignment Operators: in Assignment Operators we use to perform assigning operation, mainly we assign the value to the others similar datatype variable, Simple assignment('='), additional assignment ('+='),etc.
- Unary Operators: it is the operators we use with single literals ex- '-a','+a',++a,--a,etc
- Comparison Operators:- we use this operators to compare two variables it use as acondition also, ex- Equal to ('==') ,not equal to ('!='), greater than ('>'), Less than ('<'), greater than or equal to ('>='), etc.
- Logical Operators: we use this logical operator to perform logical operation it is widely use in if, while, etc. Example- logical and(' &&'), logical or (' || '), logical not (' ! ').
- Bitwise Operator :- it is also a very important operator it is use to perform action to the variables , example- bitwise and(' & '), bitwise or(' | '), bitwise xor(' ^ '), etc.
- Instance operator :- Instanceof operator (instanceof)
- Conditional or Ternary Operator: it is also important oprator it work similar to if else Conditional operator

2. **Explain about increment and decrement operators and give an examples ?**

Ans – we use to represent the increment and decrement in this way:-

- In increment we use to increase the no by 1 using '++' operator before and after of the no, like we can represent the increment in this way (++i, i++, i+=1)
- In decrement we use to decrease the no by using operator, this help to make code short easy and looks good, so we use different decrement by easily. We are using '----' operator before and after of the no, like we can represent the decrement in this way (--i, i--, i-=1)

3. **What are the conditional operators in java?**

Ans – there are different types of conditional Operators in java

- AND operater is use as conditional operator in java ('&&')
- OR operater is use as conditional operator in java ('||')
- NOT operater is use as conditional operator in java ('!')

4. **What are the types of operator based on the number of operands ?**

Ans – the operators can be classified on the basis of number of operands they are:-

- Unary Operator : the unary operators has single operand. Example are +a, -b, ++a, a++, --a.
- Binary Operators : binary operators use two operand . It is one of the most important .
  Examples are- a+b, a-b, a*b, a/b.
- Ternary Operator: The ternary operator is contain three operand. Example are- (case1 ? case2 : case3)

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

Ans – conditional statements play very important role in building of logics in Java . There are different types of conditional statements in java are:

- if statement: if block in java execute when the condition is true syntax of if is if(condition){}
- else statement: else block in java is execute when the condition is false Syntax of else is else{}
- else if statement : else if block is execute when the condition is true , syntax of else if is else if(condition) {}
- Switch case statement: switch statement helps us select one statement from many cases

6. **What is the syntax of if else statements ?**

Ans – the syntax of if else statement is

If(condition) {   // condition a>b

}

else{

}

7. **What are the three types of iterative statements in java ?**

Ans – the three different types iterative statement in java they are -

For loop :- for loop is the iterative statement in java that allow us to itrate using for loop.

Syntax- for(int i=0 ; i<10 ; i++)

        {

        System.out.println("hii");

        }

While loop :- while loop is the iterative statement in java that allow us to itrate using while loop. It is also known as entry control loop

Syntax – while(condition)

```
{

}
```

do while loop :- do while loop is the iterative statement in java that allow us use do while loop. It is also known as exit control loop

Syntax – do{

```
        } while( condition )
```


8. **What do you mean by an Array ?**

Ans – Array is the data structure where we use to store homogenous datatype, it holds fixed size. and we can access data by an index, it is used to store data in continues memory. In array datatype we can perform different operations.

In java array can hold element of primitive datatype (int, char, boolean, etc.

9. How to create array?

Ans – we can create array in different types , they are:-

- This way we can create array

 int [] arr = new int[10];

- Second way we can create array.

 Int arr[] = {1,2,3,4,5};

- 2d array we can create this way

 int[][] matrix = new int[3][2];

10. **State the difference between StringBuffer and StrinBuilder in java.**

Ans – the difference between StringBuffer and StrinBuilder are-

StringBuffer – it is synchronized means it is thread-safe multiple threads can safely access and modify.

StringBuilder – it is not synchronized means it is not thread-safe multiple threads can't safely access and modify.

StringBuffer- it is slower in nature compared to stringbuilder, specially in single threaded.

StringBuilder- it is faster in nature compared to stringbuffer, specially in single threaded.