

Assignment Operators and Loops.

1. what are the conditional operators in Java.

→ They are used when a conditional comprises more than one boolean expression. For instance, if we want to print a number only if it is greater than 2 and less than 5, then we will use conditional operators to combine the 2 expression. we have 3 type of conditional operators - logical - and, logical - or and ternary operators.

Logical - and operator (&&)

It is used when we want the condition to be true iff both the expressions are true.

Syntax

```
if (condition - 1 && condition - 2) {  
    Statement;  
}
```

Logical - or operator (||)

This operator is used when we are satisfied as long as any one of the boolean expression is evaluated as true.

Syntax

```
if (Condition - 1 || condition - 2) {  
    Statement ;  
}
```

Ternary operator (?:)

It is a smaller version for the if-else statement. If the condition is true then the Statement - 1 is executed else the Statement - 2 is executed.

Syntax:
Condition ? Statement - 1 : Statement - 2;

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

⇒ There are three types of operators in Java based on the number of operands. They are:

- unary operator
- Binary operator
- Ternary operator.

3. What is the use of switch case in Java programming?

⇒ Switch statement

The switch case in Java is used to select one of many code blocks for execution.

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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. A lot of execution time can be saved because it ignores the rest of the code's execution when there is a break default keyword. The keyword is used to start the code executed when the expression does not match any test case. is executed.

For example, the code below uses the monthly numbers to calculate the month name.

```
Public class main {  
    Public static void main (String[] args) {  
        int month = 4;  
        Switch (month) {  
            case 1:  
                System.out.println ("January");  
                break;  
            case 2:  
                System.out.println ("February");  
                break;  
        }  
    }  
}
```

case 3:

System.out.println("march");
break;

Case 4:

System.out.println("April");
break;

case 5:

System.out.println("may");
break;

Case 6:

System.out.println("June");
break;

default: system.out.println("in
next half");

}

}

}

Output:

April

4. what are the Priority levels of Arithmetic operation in java?
⇒ There are two Priority level of arithmetic operation in java. They are as follows:

- High Priority \times \div
- Low Priority $+$ $-$

5. what are the Conditional Statement and use of conditional statement in Java?

- ⇒ if to specify a block of code to be executed, if a specified condition is true.
- else to specify a block of code to be executed, if the same condition is false.
 - else if to specify a new condition to test, if the first condition is false.
 - switch to specify many alternative blocks of a code to be executed.

6. what is the syntax of if else statement?

⇒ if (Condition 1) {
 // block of code to be executed if condition 1 is true.
} else if (Condition 2) {
 // block of code to be executed if the condition 1 is false and Condition 2 is true.
} else {
 // block of the code to be executed if the condition 1 is false and condition 2 is false.
}

7. what are the 3 types of iterative statement in Java?

⇒ 3 types of iterative statement in Java.

- for loop
- while loop
- do-while loop.

8. Difference between for loop and do while loop.

For loop	Do-while loop
Statement(s) is executed once the condition is checked	condition is checked after the statement(s) is executed.
It might be that the statement gets executed sometimes	Statement is executed at least once
For the single statement, brackets are not compulsory	Brackets are always compulsory
Initialization may be outside or in a condition body	Initialization may be outside or within the loop.
For loop is entry controlled loop.	do-while is an exit-controlled loop.
for (init; condition; Iteration) { statement(s); }	do { statement(s); } while (condition);

Q. write a program to print numbers from 1 to 10.

⇒ Public class PrintNumbers.

{

Public static void main (String args[])

{

for (int i = 1; i < 10; i++)

{

System.out.println (i);

}

}

}