



Summary JAVA

Sessions No 4(16-10-2022)

- Pre Increment operator - **++x** - here it first increments the value of **x** by 1 and then it will store back in the x variable and then use it.
- Post Increment operator - **x++** - here it will first use this x and after this will increment the value of x by 1 and then store it back to x
- Similar to ++x and x++ we also have -- x and x-- which will decrease the value of x by 1
- Now, when we have multiple operations in an expression, then we need to decide the priority of different operators. And the operator which has more priority will be executed first.

```
1 import java.util.Scanner;
2
3 public class first {
4     public static void main(String[] args) {
5         int x=5;
6         int y=10;
7         int k;
8         k=x++ + y;
9         System.out.println(k);
10    }
11 }
12
```

Run: first x

"C:\Program Files\Amazon Corretto\jdk17.0.4_9\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.3\lib\id" 15

Process finished with exit code 0

The value changed at 'x++' is never used

- For example here priority of the **Post increment Operator** is less than “+” so here first x+y will execute then “=” will execute(means z=5+10=15) and then in the last “**X++**” will execute and the value of x will increase by 1.
- An **if else** statement in programming is a conditional statement that runs a different set of statements depending on whether an expression is true or false. checkout below **Diwali program**

```

1  import java.util.Scanner;
2
3  public class first {
4      public static void main(String[] args) {
5          Scanner sc = new Scanner(System.in);
6          int date=sc.nextInt();
7
8          if (date==24){
9              System.out.println("Happy Diwali");
10         }
11         else if(date==26 || date==27){
12             System.out.println("Happy Bhai Dooj");
13         }
14         else{
15             System.out.println("No Festival");
16         }
17     }
18 }

```

Run: first x

```

"C:\Program Files\Amazon Corretto\jdk17.0.4_9\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.3\lib\id
Happy Diwali
Process finished with exit code 0

```

In this program, we are taking the input from the user, And then we are checking whether it is equal to “24” if this is true then statements inside “***if***” will execute otherwise it will again check whether the input is equal to **26 or 27** if it is true then the statements inside ***else if*** will execute otherwise finally it will execute the statement inside ***else***.

Input- 24

Output- Happy Diwali

Input - 26

Output - Happy BhaiDooj

Input -27

Output - Happy Bhai Dooj

Input - 28

Output - No Festival

- **Logical Operators** - Logical operators are used to check whether an expression is true or false. They are used in decision-making.

Operator	Example	Meaning
&& (Logical AND)	expression1 && expression2	true only if both expression1 and expression2 are true

(Logical OR)	expression1 expression2	true if either expression1 or expression2 is true
! (Logical NOT)	!expression	true if expression is false and vice versa

- Boolean is a datatype, It is used to store only two possible values, either true or false. It specifies 1-bit of the information in the RAM.

```
boolean x=true;
```