**Increment ++ and Decrement -- Operator as Prefix and Postfix**

In this article, you will learn about the increment operator ++ and the decrement operator -- in detail with the help of examples.

In programming (Java, C, C++, JavaScript etc.), the increment operator ++ increases the value of a variable by 1. Similarly, the decrement operator -- decreases the value of a variable by 1.

a = 5

++a; // a becomes 6

a++; // a becomes 7

--a; // a becomes 6

a--; // a becomes 5

Simple enough till now. However, there is an important difference when these two operators are used as a prefix and a postfix.

**++ and -- operator as prefix and postfix**

* If you use the ++ operator as a prefix like: ++var, the value of var is incremented by 1; then it returns the value.
* If you use the ++ operator as a postfix like: var++, the original value of var is returned first; then var is incremented by 1.

The -- operator works in a similar way to the ++ operator except -- decreases the value by 1.

Let's see the use of ++ as prefixes and postfixes in C, C++, Java and JavaScript.

**Example 1: C Programming**

#include <stdio.h>

int main() {

int var1 = 5, var2 = 5;

// 5 is displayed

// Then, var1 is increased to 6.

printf("%d\n", var1++);

// var2 is increased to 6

// Then, it is displayed.

printf("%d\n", ++var2);

return 0;}

**Example 2: C++**

#include <iostream>

using namespace std;

int main() {

int var1 = 5, var2 = 5;

// 5 is displayed

// Then, var1 is increased to 6.

cout << var1++ << endl;

// var2 is increased to 6

// Then, it is displayed.

cout << ++var2 << endl;

return 0;

}

**Example 3: Java Programming**

class Operator {

public static void main(String[] args) {

int var1 = 5, var2 = 5;

// 5 is displayed

// Then, var1 is increased to 6.

System.out.println(var1++);

// var2 is increased to 6

// Then, var2 is displayed

System.out.println(++var2);

}

}

**Example 4: JavaScript**

let var1 = 5, var2 = 5;

// 5 is displayed

// Then, var1 is increased to 6

console.log(var1++)

// var2 is increased to 6

// Then, var2 is displayed

console.log(++var2)

The output of all these programs will be the same.

**Output**

**5**

**6**