



# Java - PostFix or PreFix

## 1. Postfix (Post-increment / Post-decrement)

Post - Increment  $\Rightarrow$  `i++`

post - decrement  $\Rightarrow$  `i--`

- Operator is written **after** the variable.
- First, the value is **used** in the expression, then the operation is performed.

Example:-

```
int x = 5;
int y = x++; // Post-increment
System.out.println("x = " + x); // 6
System.out.println("y = " + y); // 5
```

Explanation:-

- `x++`  $\rightarrow$  use `x` first (5) for assignment to `y`.
- Then increment `x` (5  $\rightarrow$  6).
- So `x = 6`, but `y = 5`.

## 2. Prefix (Pre-increment / Pre-decrement)

Pre - Increment  $\Rightarrow$  `++i`

pre - decrement  $\Rightarrow$  `--i`

- Operator is written **before** the variable.
- First, the operation is performed (increment/decrement), then the value is **used** in the expression.

Example:-

```
int x = 5;
int y = ++x; // Pre-increment
System.out.println("x = " + x); // 6
System.out.println("y = " + y); // 6
```

Explanation:-

- `++x` → increase `x` first (5 → 6).
- Then assign to `y`.
- So both `x` and `y` become `6`.

## Summary

- **Prefix:** Update first, then use.
- **Postfix:** Use first, then update.