

Shraddhesh-08

DETAIL NOTES

INCREMENT OR DECREMENT

Operators



INCREMENT OR DECREMENT

Increment and Decrement operators are used to increase or decrease a value by 1.

- **Increment Operator (++)**

→ increases the value by 1

- **Decrement Operator (--)**

→ decreases the value by 1

- There are two types of Increment and Decrement operators:

1.Pre-Increment / Pre-Decrement -

First, the operation is performed (value changes first), then the result is used or assigned.

Syntax -

```
++variable; // Pre-increment  
--variable; // Pre-decrement
```

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Example (Pre-Increment):

```
int a = 5;  
int b = ++a; // first increase a, then assign
```

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Output :- a = 6, b = 6

Example (Pre-Decrement) :

```
int a = 5;  
int b = --a; // first decrease a, then assign
```

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Output :- a = 4, b = 4

Program:

```
public class PreIncrement{  
    public static void main(String x [])  
    {  
        int a = 10, b;  
        b = ++a;  
  
        System.out.print("a = "+a+" b "+b);  
    }  
}
```

Output:

```
D:\SHRADDHESH-08>javac PreIncrement.java  
  
D:\SHRADDHESH-08>java PreIncrement  
a = 11 b 11  
D:\SHRADDHESH-08>
```

2. Post-Increment / Post-Decrement -

First, the current value is used or assigned, then the operation (increase or decrease) is performed.

Syntax -

```
variable++; // Post-increment  
variable--; // Post-decrement
```

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Example (Post-Increment):

```
int a = 5;  
int b = a++; // first assign a to b, then increase a
```

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Output : a = 6, b = 5

Example (Post-Decrement):

```
int a = 5;  
int b = a--; // first assign a to b, then decrease a
```

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output :- a = 4, b = 5

Program:

```
public class PostIncrement{  
    public static void main(String x [])  
    {  
        int a = 10, b;  
        b = a++;  
  
        System.out.print("a = "+a+" b "+b);  
    }  
}
```

Output:

```
D:\SHRADDHESH-08>javac PostIncrement.java  
  
D:\SHRADDHESH-08>java PostIncrement  
a = 11 b 10
```