

Assignment/Pre/Post Increment Operators.

*Post-increment Operator:

1. ++ sign is mentioned after the variable name:

eg: a++;

2. it increases the value by 1.

3. it first stores its value into another variable and then increments by 1.

eg: Store thing in refrigerator and then move outside.

*Pre-increment Operator:

1. ++ sign is mentioned before the variable name:

eg: ++a;

2. it increases the value by 1.

3. it first increases the value by 1 and later stores the value into another variable.

```
int a=23;
```

```
int b;
```

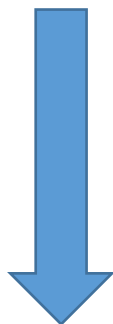
```
b=++a;
```

```
b=24
```

eg: Javelin throw

Operator	Result
+	Addition (also unary plus)
-	Subtraction (also unary minus)
*	Multiplication
/	Division
%	Modulus
++	Increment
+=	Addition assignment
- =	Subtraction assignment
*=	Multiplication assignment
/=	Division assignment
%=	Modulus assignment
--	Decrement

Program Below



```

public class ArtihmeticOperations2
{
    public static void main(String args[])
    {
        System.out.println("Assignment Operator\n");
        int a=73;
        int b=10;

        a+=b; // a=a+b;  a=83,  a+=b 83

        System.out.println("Addition Assignment: a is="+a);
        System.out.println("\n-----\n");

        a-=b; //a=a-b;  a=73,  a-=b 73

        System.out.println("Subtraction Assignment: a is="+a);

        System.out.println("\n-----\n");
        int p=5;
        int q=23;

        p*=q; //p=p*q;

        System.out.println("Multiplications Assignmet: p is="+p);

        System.out.println("\n-----\n");

        double a2=19;
        double b2=4;

        a2/=b2; // a2=a2/b2;  a2=19/4;

        System.out.println("Divsion Assignment: a2 is =" +a2);

        System.out.println("\n-----\n");

        int p2=19;
        int q2=4;

        p2%=q2; // p2=p2%q2;  p2=19%4;

        System.out.println("Modulus Assignment p2 is="+p2);

        System.out.println("\n-----\n");
    }
}

```

```

System.out.println("Increment");

int num1=13;
System.out.println("\n num1 is:"+num1);//13

num1++; // num1=num1+1;

System.out.println("\n num1 is:"+num1);//14

num1++;

System.out.println("\n num1 is:"+num1);

System.out.println("\n Pre-Increment Operator\n");

int value1=13;
int value2;
System.out.println("value1 is:"+value1);//13

value2= ++value1; // value1=value1+1 13+1=14

System.out.println("Value2 is:"+value2); //14

System.out.println("pre-increment\n");
int r1=13;
int r2;

System.out.println("r1 is:"+r1);

r2=++r1; //First the value is increased then the value is
stored(another variable).

System.out.println("r2 is:"+r2);//14
System.out.println("r1 is:"+r1);//14

System.out.println("\n-----\n");

System.out.println("post increment");

int p3=19;
int q3;

System.out.println("p3 is:"+p3);

```

Increased. q3=p3++; //First Value is Stored(another variable) and then

```
System.out.println("p3 is:"+p3); //20
```

```
System.out.println("q3 is:"+q3); //19
```

```
System.out.println("-----");
```

```
int c1=30;
```

```
int c2;
```

```
c2=c1++;
```

```
System.out.println("c2 is:"+c2); //30
```

```
System.out.println("c1 is:"+c1); //31
```

```
//c2=30, c1=31
```

```
c2++; //c2=30+1
```

```
System.out.println("c2 is:"+c2); //31
```

```
//c2=31
```

```
c2++;
```

```
System.out.println("c2 is:"+c2); //32
```

```
//c2=32, c1=31
```

```
c2=c1++; //
```

```
System.out.println("c2 is:"+c2); //
```

```
System.out.println("c1 is:"+c1);
```

```
//c2=31, c2=32
```

```
c2=c1++;
```

```
System.out.println("c2 is:"+c2); //32
```

```
System.out.println("c1 is:"+c1); //33
```

```
}
```

```
}
```

OutPut:

Assignment Operator

Addition Assignment: a is=83

Subtraction Assignment: a is=73

Multiplication Assignmet: p is=115

Divsion Assignment: a2 is =4.75

Mudulus AssignmentL p2 is=3

Increment

num1 is:13

num1 is:14

num1 is:15

Pre-Increment Operator

value1 is:13

Value2 is:14

pre-increment

r1 is:13

r2 is:14

r1 is:14

post increment

p3 is:19

p3 is:20

q3 is:19

c2 is:30

c1 is:31

c2 is:31

c2 is:32

c2 is:31

c1 is:32

c2 is:32

c1 is:33