Increment and Decrement Operator

- Here we have pre and post increment
- For example :

```
Int x = 5;

x++;                    // post increment


++x;                    // pre increment
```

- Although they both give the same ans however their working is different

- In post increment it first use the value of x then increment x
- In pre increment it first increment x then use it

- This works on float , byte and char as well

- Only on boolean type this operations does not work

INCREMENT AND DECREMENT--

int x=5;
x++;----------6
++x;----------7
---

int x=5,y;
y=x++;

in postincrement order first value is assigned and gets incremented
so,
y=5
x=6

---

int x=5,y;
y=++x;

in preincrement order first value is get incremented and then it is assigned
so,
x=6
y=6

Increment and Decrement

- Post Increment | Post decrement
  ఉంటే & value ne vadi [illegible] increment or decrement chayli

- Pre Increment | Post decrement
  ఉంటే & value ~~ne vadi~~ increment/ derement chaylimundo.

Some examples :-

1) $x = 5$
   $y = ++x$
   Pre sol
   $y = 6$
   $x = 6$

2) $x = 5$
   $y = x++$ (5)
   Then incremented
   sol
   $y = 5$
   $x = 6$

2) $x = 5, y = 4, z;$
   $z = 2 * x++ + 3 * ++x$
   $z = 2 * (5)$ (Then $x = 6$) $+ 3 * 7$ ($x = 7$)
   $z = 10 + 21$
   $z = 31$ //:

3) a=34
b=21
c=a++ + ++b;
d=--a + --b + c--;
e=a + +b + +c + d--;
f=-a +b-- + -c -d++;
sum=a+b+c+d+e+f
sum=?

Sol

c= a++ + ++b
c = 34(a=35) + 22(b=22)
c = 34+22
c = 56

a=35
b=22

d= --a + --b + c--
d = 34(a=34) + 21(b=21) + 56(c=55)
d = 111

a=34
b=21
c=55

e = a + +b + +c + d--
e = 34+21+55+111 (d=110)
e = 221

a=34
b=21
c=55
d=110

$f = -a + b-- + -c - d++$

$= -34 + 21 (b=20) + (-55) - 110 (d=111)$

$\boxed{f = -178}$

$a = 34$
$b = 20$
$c = 55$
$d = 111$
$e = 221$
$f = -178$

$sum = a+b+c+d+e+f = 263$

$\boxed{sum = 263}$

---

4) $i = 4$
$j = 21$

$K = ++i * 7 + 2 + j--$

$= 5 (i=5) * 7 + 2 - 21 (j=20)$

$= 35 - 19$

$\boxed{K = 16}$ $\boxed{i = 5}$ $\boxed{j = 20}$

5) a = 1
b = 2

```
c = ++b;
d = a++;
c++;
```

Sol:- c = ++b

c = 3 (b = 3)

c = 3
b = 3

d = a++

d = 1 (a = 2)

d = 1
a = 2

c++ = 4

Final **a = 2 | b = 3 | c = 4 | d = 1**

---

6) a = 7

b = ++a + ++a + ++a

b = 8 (a = 8) + 9 (a = 9) + 10 (a = 10)

b = 27 **a = 10**

7) $l = 0$

$K = l++$

$j = ++K$

$i = j++$

sol :-

$K = 0 \ (l = 1)$

$K = 0$
$l = 1$

$j = ++K$

$j = 1 \ (K = 1)$

$j = 1$
$K = 1$

$i = j++$

$i = 1 \ (j = 2)$

$i = 1$
$j = 2$
$K = 1$
$l = 1$