

Increment / Decrement:

prefix Increment: [Left to Right]

```
int b=0, a=1;
b = a++
```

Initial: 1 0
 a b

final: 2 1
 a b

post fix Increment: [Right to Left]

```
int b=0, a=1;
b = ++a
```

Initial: 1 0
 a b

final 2 2
 a b

3 034-331 Wednesday

Example: $\text{int } b=1, a=0$: for all

$$1) \quad a = \overset{\boxed{2}}{b++} + \overset{\boxed{3}}{b++};$$

$$1 + 2 \Rightarrow 3$$

$$2) \quad a = \overset{\boxed{2}}{++b} + \overset{\boxed{3}}{++b}$$

$$3 + 3 \Rightarrow 6$$

$$3) \quad a = \overset{\boxed{2}}{b++} + \overset{\boxed{3}}{++b}$$

$$1 + 3 \Rightarrow 4$$

4 035-330 Thursday

$$4) \quad a = \overset{\boxed{2}}{++b} + \overset{\boxed{3}}{b++}$$

$$3 + 2 \Rightarrow 5$$

$$5) \quad a = (\overset{\boxed{2}}{++b} + \overset{\boxed{3}}{b++}) + \overset{\boxed{4}}{++b}$$

$$\underbrace{3 + 2}_{5} + 4 \Rightarrow 9$$

$$6.) a = (\overset{\boxed{2}}{b++} + \overset{\boxed{3}}{++b}) + \overset{\boxed{4}}{++b}$$

$$(1 + 3) + 4$$

$$4 + 4 \Rightarrow 8$$

036-329
Friday 5

$$7.) a = (\overset{\boxed{2}}{b++} * \overset{\boxed{3}}{++b}) + \overset{\boxed{4}}{++b}$$

$$1 * 3 = 3$$

$$+ 4 \Rightarrow 7$$

$$8.) a = \overset{\boxed{2}}{b++} + (\overset{\boxed{3}}{++b} * \overset{\boxed{4}}{++b})$$

$$1 + (4 * 4)$$

$$1 + 16 \Rightarrow 17$$

037-328
Saturday 6

$$9.) a = \overset{\boxed{2}}{++b} + \overset{\boxed{3}}{b++} * \overset{\boxed{4}}{++b}$$

$$(2 * 4)$$



$$4 + 8 \Rightarrow 12$$

038-327
Sunday 7

$$10.) a = (\overset{\boxed{2}}{++b} * \overset{\boxed{3}}{b++}) + \overset{\boxed{4}}{++b}$$

$$3 * 2 = 6$$

$$+ 4 \Rightarrow 10$$

February

2021
FEB
2021
14

8 ⁰³⁹⁻³²⁶ Monday

11) $a = \boxed{2} + \boxed{3} + \boxed{4} + \boxed{5}$
 $a = ++b + b++ + ++b + b++$
 (3 + 2)
 5 + 4
 9 + 4 = 13

Note: If current operator \geq next operator sub ++ values for all previous terms.

9 ⁰⁴⁰⁻³²⁵ Tuesday

12) $a = \boxed{2} \boxed{3} \boxed{4} \boxed{5}$
 $a = (++b * b++) + ++b + b++$
 3 * 2
 6 + 4
 10 + 4 \Rightarrow 14

13) $a = \boxed{2} \boxed{3} \boxed{4} \boxed{5}$
 $a = ++b + (b++ * ++b) + b++$
 (2 * 4)
 (4 + 8)
 12 + 4 = 16

$$a = \overset{\boxed{2}}{++b} + \overset{\boxed{3}}{b++} + \overset{\boxed{4}}{++b} * \overset{\boxed{5}}{b++}$$

041-324
Wednesday 10

$$\underbrace{3 + 2}_5 + (5 * 4) = 5 + 20 \Rightarrow 25$$

$$15.) a = \overset{\boxed{2}}{++b} * \overset{\boxed{3}}{b++} * \overset{\boxed{4}}{++b} + \overset{\boxed{5}}{b++}$$

$$\underbrace{3 * 2}_6 * 4 = 6 * 4 = 24$$

$$24 + 4 = 28$$

$$16.) a = \overset{\boxed{2}}{++b} * \overset{\boxed{3}}{b++} + \overset{\boxed{4}}{++b} * \overset{\boxed{5}}{b++}$$

042-323
Thursday 11

$$\underbrace{3 * 2}_6 + (5 * 4) = 6 + 20 = 26$$

$$6 + 20 \Rightarrow 26$$

$$17.) a = \overset{\boxed{2}}{++b} + \overset{\boxed{3}}{b++} * \overset{\boxed{4}}{++b} * \overset{\boxed{5}}{b++}$$

$$\underbrace{2 * 4}_8 * 5 = 8 * 5 = 40$$

$$5 + 32 \Rightarrow 37$$

February

2021

Increment / Decrement & Print Statement

12 Friday

- * Evaluate Right to Left [Not satisfy for postfix alone]
- * Assign Left to Right. [++a * a]

Example: a=1

1) `printf("%d %d %d", ++a, a, a++);`
 3 3 1
 ↳ Assign, st
 ⇒ 3 3 1

2) `printf("%d %d %d %d", a, ++a, a++, a++);`
 4 4 2 1
 ⇒ 4 4 2 1

13 Saturday

3) `printf("%d %d %d %d", a, a, (++a + a++), ++a);`
 4 4 4 + 3 4
 7
 ⇒ 4 4 7 4

4) `printf("%d %d %d %d", a++ + a, a++ * ++a, ++a);`
 5 + 6 ⇒ 11 3 * 5 ⇒ 15
 6 4 5

14 Sunday

`printf("%d %d %d %d", a++ + a, a++ * ++a, ++a);`
 3 2
 2 6
 ⇒ 11 15 2 6

Week 7

int a=1, b=1, d=1;

5.) printf("%.1d, %.1d, %.1d",

$\boxed{4}$ $\boxed{5}$ $\boxed{6}$ ^{04/19} 15
 ++a + ++a + a++, Monday
 $5 + 5 + 5 \Rightarrow 15$

$\boxed{3}$ $\boxed{2}$ $\textcircled{2}$
 a++ + ++b,
 $2 + 2 \Rightarrow 4$

$\boxed{2}$ $\boxed{3}$ $\boxed{2}$ $\textcircled{1}$
 ++d + d++ + a++);
 $3 + 2 + 1 \Rightarrow 6$