

Arithmetic Operators :

$\% \rightarrow$ modulo \rightarrow returns the remainder after division

$$10 \% 3 = 1$$

$$10 \% 4 = 2$$

$$100 \% 5 = 0$$

$$\begin{array}{r} 3 \overline{) 10} \\ \underline{9} \\ 1 \end{array}$$

$$\begin{array}{r} 2 \overline{) 10} \\ \underline{8} \\ 2 \end{array}$$

$$\begin{array}{r} 20 \overline{) 100} \\ \underline{100} \\ 0 \end{array}$$

$$1 \% 3 = 1$$

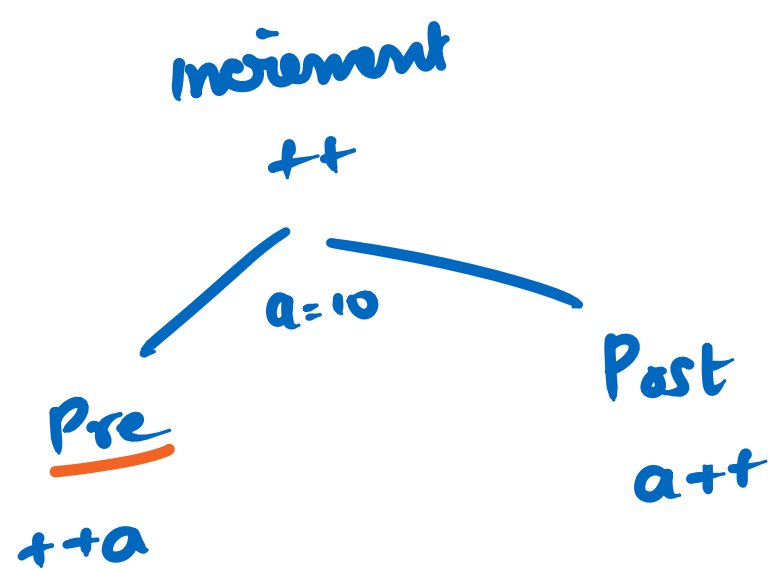
$$\begin{array}{r} 0 \overline{) 1} \\ \underline{0} \\ 1 \end{array}$$

$++ \rightarrow$ increment \rightarrow adds 1

$-- \rightarrow$ decrement \rightarrow subtracts 1

$$\begin{array}{c} a = 10 \\ ++ \\ \downarrow \\ 11 \end{array} \quad \begin{array}{c} ++ \\ \downarrow \\ 12 \end{array}$$

$$\begin{array}{c} a = 10 \\ -- \\ \downarrow \\ 9 \end{array} \quad \begin{array}{c} -- \\ \downarrow \\ 8 \end{array}$$



\checkmark $\text{int } a = 10;$ 10
 $\text{cout}(\underline{++a}); \rightarrow 11$
 $\text{cout}(a); \rightarrow 11$

$\text{int } b = \underline{a++}$
 $b = 10$
 $a = 11$

$\text{int } b = \underline{++a}$
 $b = 11$
 $a = 11$

$\text{int } a = 10;$
 $a++; ++a;$
 $\text{cout}(a);$ $\textcircled{11}$ \checkmark

$\text{int } a = 10; \quad 10$
 $\checkmark \text{cout}(\underline{a++}); \rightarrow 10$
 $\text{cout}(\underline{a}); \rightarrow 11$