

Operators

int a = 10
int b = 5

1) Arithmetic

$a + b \Rightarrow 15$
 $a - b \Rightarrow 5$
 $a * b \Rightarrow 50$
 $a / b \Rightarrow 2$
 $\% \rightarrow$
 $++$
 $--$

$a \% b$

$10 \% 5 \Rightarrow 0$

$$\begin{array}{r} 2 \\ 5 \overline{)10} \\ \underline{10} \\ 0 \end{array}$$

$20 \% 3 = 2$

$$\begin{array}{r} 6 \\ 3 \overline{)20} \\ \underline{18} \\ 2 \end{array}$$

$\% = \text{modulo}$

\rightarrow returns the remainder after division
 \rightarrow divisibility.

unary $\left\{ \begin{array}{l} ++ \rightarrow \text{increment} \\ -- \rightarrow \text{decrement} \end{array} \right.$

int a = 10

a++

11

a++ \rightarrow 12

$\begin{array}{cc} \overline{a++} & \overline{++a} \\ b++ & ++b \\ a-- & --a \\ b-- & --b \end{array}$

Pre-increment
decrement

$++a, --a$

Post-increment

$a++, a--$

int a = 10;

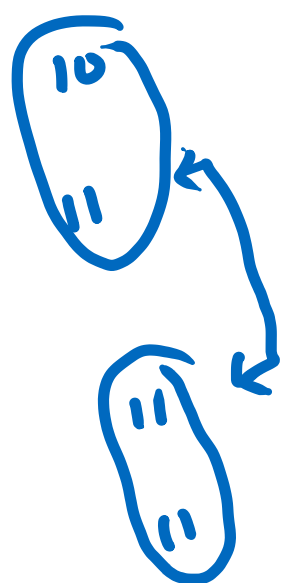
cout << a++;

cout << a;

int a = 10;

cout << ++a;

cout << a;



int a = 10;

int b = a++;

int a = 10;

int b = ++a;

Conditional Statements

$\begin{array}{l} \text{true} \\ \text{(condition)} \\ \{ \\ \} \end{array}$