

Conditional Operator is Shorthand for If/Then/Else

The code to the right

- **assigns one of two values** to **A**
- **based on a condition.**

```
if (B > 0) {
    A = C;
} else {
    A = D;
}
```

C provides a conditional operator for this type of construct:

```
A = (B > 0 ? C : D);
```

Increment and Decrement Change Integer Variables

C provides two operators to

- **increment (++)** and
- **decrement (--)**
- integer variables.

One can write either operator before (pre-) or after (post-) a variable name.

```
int i;
i++; // Used by themselves,
++i; // these are identical.
```

Read Increment and Decrement from Left to Right

The **difference** in pre- and post- versions **arises when one uses the value of the expression.**

Read left to right:

- **i++** : **read the value, then increment i**
- **++i**: **increment i, then read it**

Example of Pre- and Post-Increment

For example ...

```
int i = 18;
int j = 23;
int k;

k = (++i) + (j++);
```

What are **i**, **j**, and **k** afterward?
i is 19, **j** is 24, and **k** is 42 (19 + 23).