The Conditional Operator

The conditional or selection operator uses two symbols: `?` and `:`, along with three different operands. It is also known as **the ternary operator** or **tertiary** operator for the number of operands. The general form is

```
(condition) ? true-result : false-result
```

The parentheses are not technically required, but programmers often include them to make things clearer. Here's how the conditional operator works:

1. The condition is evaluated.
2. If the condition is **`true`**, ***`true-result`*** is evaluated and used as the expression's value.
3. If the condition is **`false`**, then ***`false-result`*** is used as the expression's.

Here are two examples:

```
1 int largest = (x > y) ? x : y;
2 cout << ((cats != 1) ? "cats" : "cat") << endl;
```

- **Line 1** assigns the larger of **`x`** or **`y`** to the variable **`largest`**, without the need for a multi-line ***`if`*** statement.
- **Line 2** prints **`"cat"`** if there is only one cat, and **`"cats"`** otherwise.

Note that when you use the conditional operator as part of an output statement, you **must** parenthesize the whole expression, since it has very low precedence.