Conditional Operator

In this lesson, you will get acquainted with the conditional operator in C++.

We'll cover the following

Introduction

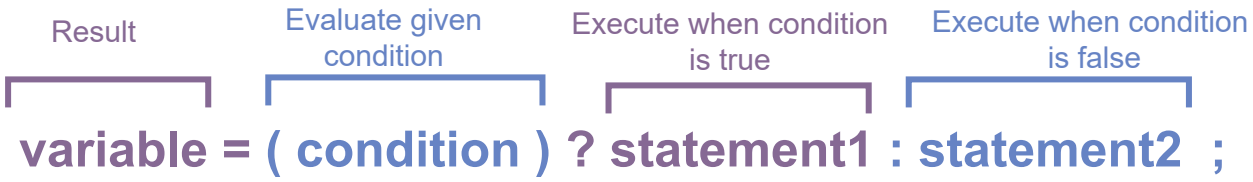
Let's have a look at another form of the `if-else` statement.

---

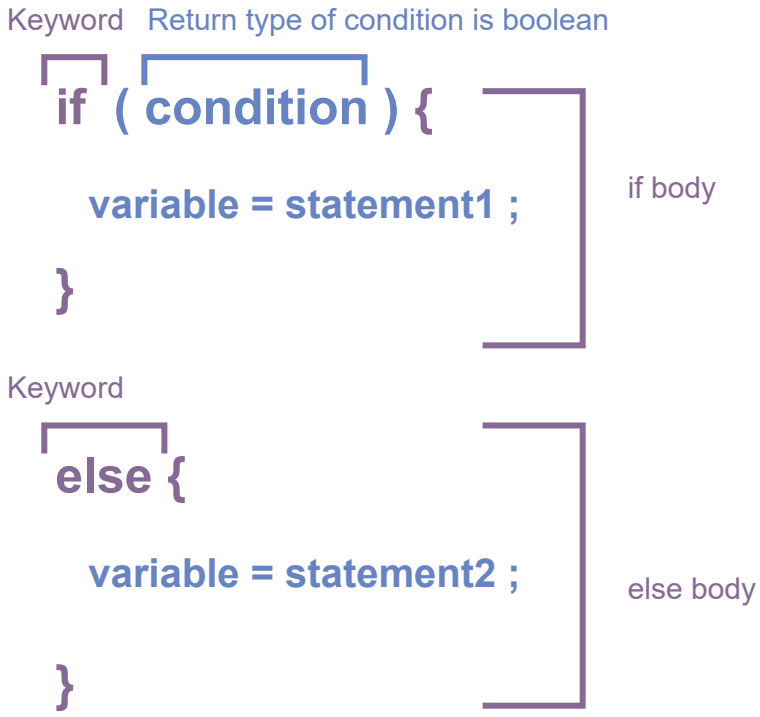
*The **conditional operator** evaluates the given condition and then returns the result accordingly.*

Syntax

The basic syntax of the conditional operator is given below:



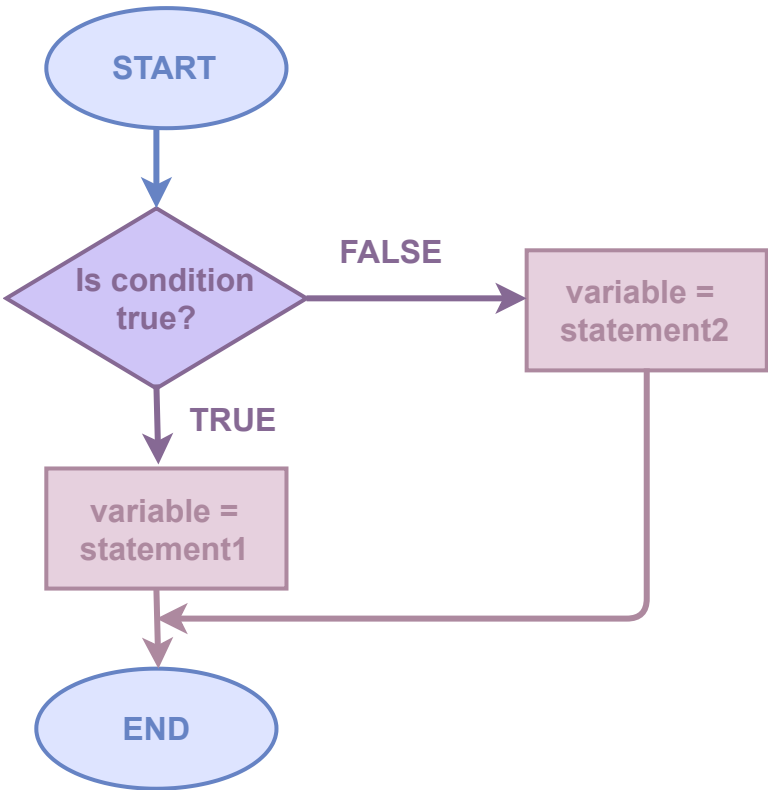
Let's map the syntax of the conditional operator on to the `if-else` statement.



> The conditional operator operates on three operands. Therefore, it is known as the ternary operator.

Flowchart

The flowchart given below explains the workings of the conditional operator:



In the above figure:

In the above figure.

- If the condition evaluates to true, then statement1 is executed.
- If the condition evaluates to false, then statement2 is executed.

Example program

Consider the same example we discussed in the if-else lesson. You can buy a watch for your friend if you have at least $20, else you can gift them a pen. Let's convert this example into a C++ program.

Run the code below and see how the conditional operator works!

```
#include <iostream>

using namespace std;

int main() {
  // Initialize variable money
  int money = 10;
  // Declare variable result
  string result;
  // Ternary operator
  result = (money >= 20) ?  "You can gift a watch" : "You can gift a pen " ;
  // prints result
  cout << result;
  return 0;
}
```

Explanation

Line No. 7: Initializes a variable `money`.

Line No. 9: Declares a variable `result` of type string for storing the output of a

ternary operator.

Line No. 11: If the condition `money>=20` evaluates to true, then the `result` stores, `"You can gift a watch"`. Otherwise, the condition evaluates to false, and the result stores `"You can gift a pen"`.

Line No. 13: Prints the value of the variable `result`.

If `number = 25.9`, then what is the output of the following code?

```
(number < 20) ? cout << "I am less than 20 ": cout << "I am great
er than 20";
```

Retake Quiz

This sums up our discussion of conditional statements in C++. Let’s test our knowledge by solving a few challenges in the upcoming lessons!

See you there!