

SEARCH

RESOURCES

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### If Statements

C++ `if` statements work very similarly to `if` statements in other languages. In C++, the boolean condition is contained in parentheses `( and )`, and the body of the statement is enclosed in curly brackets `{ and }`.

Try executing the cell below. Once you have done that, initialize the variable `a` to `true` and execute the cell again:

```
In [ ]: #include <iostream>
using std::cout;

int main()
{
    // Set a equal to true here.
    bool a = false;

    if (a) {
        cout << "Hooray! You made it into the if statement!" << "\n";
    }
}
```

Compile & Execute

Explain

Loading terminal (id\_9bkwqcd), please wait...

### While Loops

The syntax for a `while` loop looks very similar to the syntax for the `if` statement:

```
In [ ]: #include <iostream>
using std::cout;

int main()
{
    auto i = 0;

    while (i < 5) {
        cout << i << "\n";
        i++;
    }
}
```

Compile & Execute

Explain

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### Practice

In the following code cell, you will combine a `while` loop with an `if` statement to print every other number. Write a while loop to iterate over the integers from 1 to 10. If the integer is even, print it out.

Hint: you can tell if an integer is even by looking at its remainder after dividing by two. In C++, the remainder operator is `%`. In other words, for a given `int i`, you have `remainder = i % 2`. If `remainder` equals 0, the number is even.

```
In [ ]: #include <iostream>
using std::cout;

int main()
{
    // Write your code here.
    int i = 1;
    while(i <= 10) {
        if(i % 2 == 0) {
            cout << i << "\n";
        }
        i++;
    }
}
```

Compile & Execute

Show Solution

Loading terminal (id\_s8niqzi), please wait...