

# Topic7(Logical Operators(And, Or and Not))

## C++ Logical Operators

As with comparison operators, you can also test for true(1) or false(0) values with logical Operators.

Logical operators are used to determine the logic between variables or values:

Operator	Name	Description	Example
&&	Logical AND	Returns true if both statements are true	x < 5 && x < 10
	Logical OR	Returns true if one of the statements is true	x < 5    x < 4
!	Logical NOT	Reverse the result, returns false if the result is true	!(x < 5 && x < 10)

```
#include<iostream>
#include<string>

using namespace std;

int main(int argc, char const *argv[])
{
    // Declare variables
    int x = 5, y = 3;

    // Logical AND
    cout << "Logical AND : " << (x > 3 && x < 10) << endl;
    // returns true (1) because 5 is greater than 3 AND 5 is less than 10

    // Logical OR
    cout << "Logical OR : " << (x > 3 || x < 4) << endl;
    // returns true (1) because one of the conditions are true (5 is greater than 3, but 5 is not less than 4)

    // Logical NOT
    cout << "Logical NOT : " << !(x < 5 && x < 10) << endl;
    // returns false (0) because ! (not) is used to reverse the result

    return 0;
}
```