

C++ BITWISE OPERATORS

http://www.tutorialspoint.com/cplusplus/cpp_bitwise_operators.htm

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Try the following example to understand all the bitwise operators available in C++.

Copy and paste the following C++ program in test.cpp file and compile and run this program.

```
#include <iostream>
using namespace std;

main()
{
    unsigned int a = 60;    // 60 = 0011 1100
    unsigned int b = 13;    // 13 = 0000 1101
    int c = 0;

    c = a & b;              // 12 = 0000 1100
    cout << "Line 1 - Value of c is : " << c << endl ;

    c = a | b;              // 61 = 0011 1101
    cout << "Line 2 - Value of c is: " << c << endl ;

    c = a ^ b;              // 49 = 0011 0001
    cout << "Line 3 - Value of c is: " << c << endl ;

    c = ~a;                 // -61 = 1100 0011
    cout << "Line 4 - Value of c is: " << c << endl ;

    c = a << 2;              // 240 = 1111 0000
    cout << "Line 5 - Value of c is: " << c << endl ;

    c = a >> 2;              // 15 = 0000 1111
    cout << "Line 6 - Value of c is: " << c << endl ;

    return 0;
}
```

When the above code is compiled and executed, it produces the following result:

```
Line 1 - Value of c is : 12
Line 2 - Value of c is: 61
Line 3 - Value of c is: 49
Line 4 - Value of c is: -61
Line 5 - Value of c is: 240
Line 6 - Value of c is: 15
```