

OPERATORS PRECEDENCE IN C++

Try the following example to understand operators precedence concept available in C++. Copy and paste the following C++ program in test.cpp file and compile and run this program.

Check the simple difference with and without parenthesis. This will produce different results because `,` `*` and `+` have different precedence. Higher precedence operators will be evaluated first:

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

main()
{
    int a = 20;
    int b = 10;
    int c = 15;
    int d = 5;
    int e;

    e = (a + b) * c / d;      // ( 30 * 15 ) / 5
    cout << "Value of (a + b) * c / d is :" << e << endl ;

    e = ((a + b) * c) / d;    // (30 * 15 ) / 5
    cout << "Value of ((a + b) * c) / d is :" << e << endl ;

    e = (a + b) * (c / d);   // (30) * (15/5)
    cout << "Value of (a + b) * (c / d) is :" << e << endl ;

    e = a + (b * c) / d;    // 20 + (150/5)
    cout << "Value of a + (b * c) / d is :" << e << endl ;

    return 0;
}
```

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

```
Value of (a + b) * c / d is :90
Value of ((a + b) * c) / d is :90
Value of (a + b) * (c / d) is :90
Value of a + (b * c) / d is :50
```