

C++ COMMA OPERATOR

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

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The purpose of comma operator is to string together several expressions. The value of a comma-separated list of expressions is the value of the right-most expression. Essentially, the comma's effect is to cause a sequence of operations to be performed.

The values of the other expressions will be discarded. This means that the expression on the right side will become the value of the entire comma-separated expression. For example:

```
var = (count=19, incr=10, count+1);
```

Here first assigns count the value 19, assigns incr the value 10, then adds 1 to count, and finally, assigns var the value of the rightmost expression, count+1, which is 20. The parentheses are necessary because the comma operator has a lower precedence than the assignment operator.

To see the effects of the comma operator, try running the following program:

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

int main()
{
    int i, j;

    j = 10;
    i = (j++, j+100, 999+j);

    cout << i;

    return 0;
}
```

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

```
1010
```

Here is the procedure how the value of i gets calculated: j starts with the value 10. j is then incremented to 11. Next, j is added to 100. Finally, j *still containing* 11 is added to 999, which yields the result 1010.

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