

Order of Evaluation in C++17 Solutions

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- C++17 has new rules concerning the evaluation order of expressions.
What are the advantages of these new rules?
 - The new rules better match the programmer's expectations
 - These rules also help concurrent programs maintain their integrity

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- Briefly describe the changes that have been made to order of evaluation of expressions in C++17
 - In C++17, expressions are evaluated from left to right
 - The main exception is assignment, which is evaluated from right to left

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- In what order are the following expressions evaluated in C++17?

`a + b + c;`

*// a is evaluated first, then b, then c
// then (a + b), then (a + b) + c*

`a + b * c;`

*// a is evaluated first, then b, then c
// then (b * c), then a + (b * c)*

`a = b = c;`

// c is evaluated first, then b, then a

`arr[i] = b + c;`

*// b is evaluated first, then c, then (b + c)
// then arr, then i, then arr[i]*

`cout << func1() << func2();`

// func1() is called and returns before func2() is called