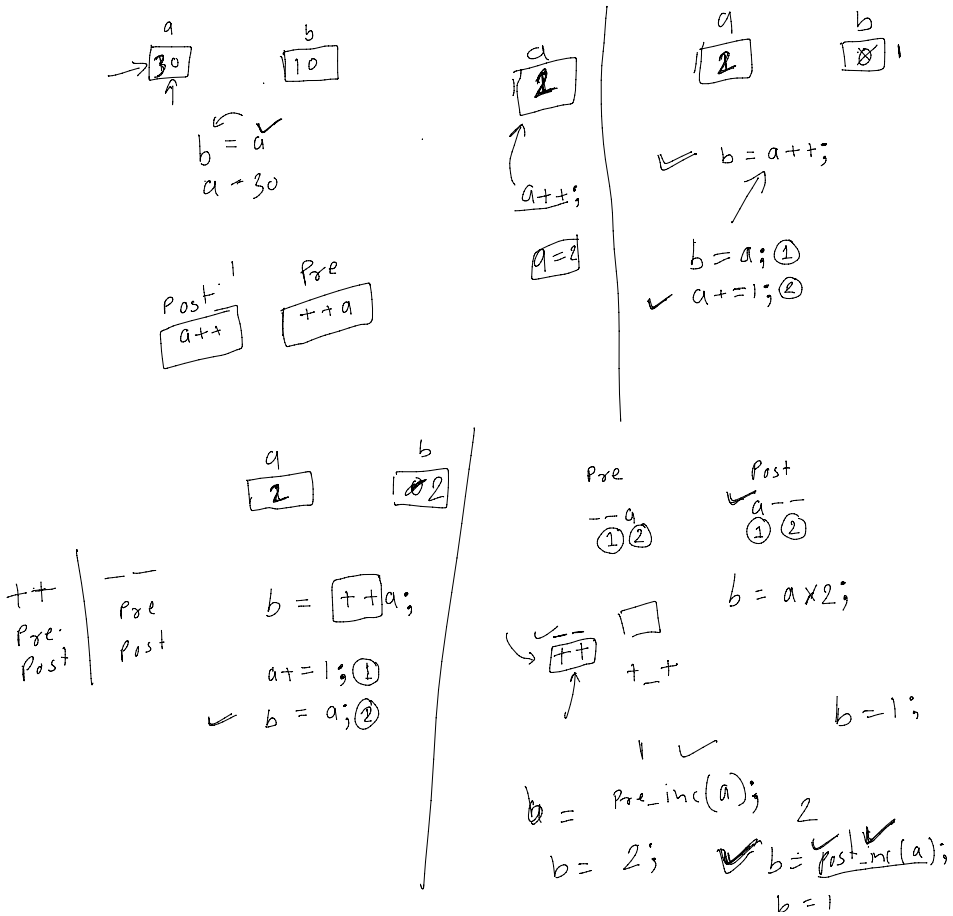
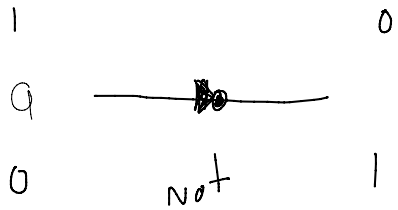
Day 8

05 March 2022 07:48



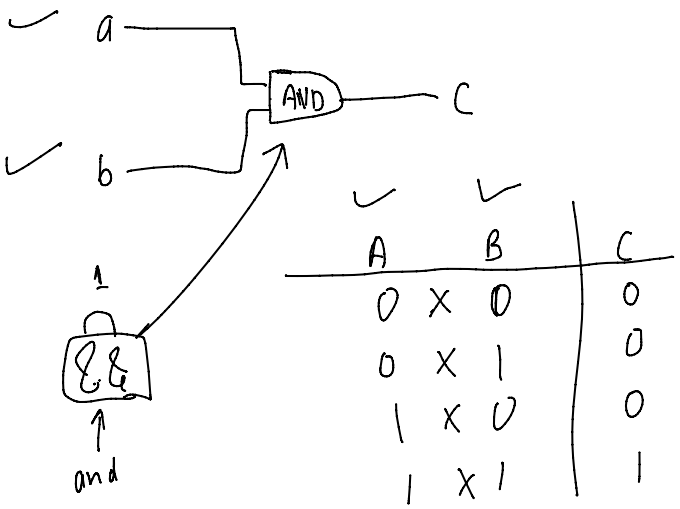

| Precedence | Operator | Description | Associativity |
|---|---|---|---|
| 1 | :: | Scope resolution | Left-to-right → |
| 2 | a++ a-- | Suffix/postfix increment and decrement | |
| | *type*() *type*{} | Functional cast | |
| | a() | Function call | |
| | a[] | Subscript | |
| | . -> | Member access | |
| 3 | ++a --a | Prefix increment and decrement | Right-to-left ← |
| | +a -a | Unary plus and minus | |
| | ! ~ | Logical NOT and bitwise NOT | |
| | (*type*) | C-style cast | |
| | *a | Indirection (dereference) | |
| | &a | Address-of | |
| | sizeof | Size-of[note 1] | |
| | co_await | await-expression (C++20) | |
| | new new[] | Dynamic memory allocation | |
| | delete delete[] | Dynamic memory deallocation | |
| 4 | .* ->* | Pointer-to-member | Left-to-right → |
| 5 | a*b a/b a%b | Multiplication, division, and remainder | |
| 6 | a+b a-b | Addition and subtraction | |
| 7 | << >> | Bitwise left shift and right shift | |
| 8 | <=> | Three-way comparison operator (since C++20) | |
| 9 | < <= > >= | For relational operators < and ≤ and > and ≥ respectively | |
| 10 | == != | For equality operators = and ≠ respectively | |
| 11 | a&b | Bitwise AND | |
| 12 | ^ | Bitwise XOR (exclusive or) | |
| 13 | \| | Bitwise OR (inclusive or) | |
| 14 | && | Logical AND | |
| 15 | \|\| | Logical OR | |
| 16 | a?b:c | Ternary conditional[note 2] | Right-to-left ← |
| | throw | throw operator | |
| | co_yield | yield-expression (C++20) | |
| | = | Direct assignment (provided by default for C++ classes) | |
| | += -= | Compound assignment by sum and difference | |
| | *= /= %= | Compound assignment by product, quotient, and remainder | |
| | <<= >>= | Compound assignment by bitwise left shift and right shift | |
| | &= ^= \|= | Compound assignment by bitwise AND, XOR, and OR | |
| 17 | , | Comma | Left-to-right → |



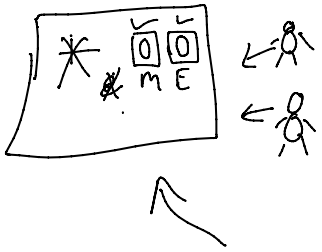

(!)

C | C++

!a




| A | B | C |
|---|---|---|
| 0 | X 0 | 0 |
| 0 | X 1 | 0 |
| 1 | X 0 | 0 |
| 1 | X 1 | 1 |




3 or → ||

| | | |
|---|---|---|
| 0 | 0 | → 0 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 1 | 1 |