

C++ syntax

- ☒ Input/Output sync
- ☒ Optimization pragmas
- ☒ Printing structs
- ☒ Lambda func for sorting

Algebra

- ☒ Binary Exponention
- ☒ Extended Euclidean
- ☒ Linear Diophantine
- ☒ Linear Sieve
- ☐ Miller Rabin (deterministic)
- ☐ Pollard Rho
- ☐ Euler's Totient
- ☒ Modular Inverse
- ☐ Chinese Remainder Theorem
- ☐ Garner's Algorithm
- ☐ Factorial modulo p
- ☐ Discrete Logarithm
- ☐ Primitive Root
- ☐ Discrete Root
- ☐ Montgomery Multiplication
- ☐ Balanced Ternary
- ☐ Gray Code
- ☐ Bit manipulation
- ☐ Enumerating bitmask subsets
- ☐ Arbitrary Precision
- ☒ Fast Fourier Transform
- ☐ Continued Fractions
- ☐ System of Linear Equations

Data Structures

- ☒ Sparse Table
- ☒ Disjoint Set Union
- ☒ Fenwick Tree
- ☒ Fenwick Tree Range Update
- ☐ Sqrt decomposition
- ☒ Segment Tree
- ☒ Treap
- ☒ Merge Sort Tree
- ☐ Sqrt tree
- ☐ Randomized Heap
- ☒ Trie
- ☒ Aho-Corasick

Dynamic Programming

- ☐ Divide & Conquer DP
- ☐ Knuth's Optimization
- ☒ Longest Increasing Subsequence

- ☒ Convex Hull Trick
- ☒ SOS DP (Sum over Subsets)

String Processing

- ☒ Z-function
- ☒ Suffix array
- ☒ KMP prefix function
- ☒ Rabin-Karp

Graph algorithms

- ☒ Floyd-Warshall

Geometry

- ☒ Dot product
- ☒ Cross product
- ☒ Line-Point distance
- ☒ Shoelace formula
- ☒ From segment to line
- ☒ Three point orientation
- ☒ Line-Line intersection
- ☒ Segment intersection
- ☐ 3 points circle
- ☐ Reflection & Rotation
- ☒ Convex Hull
- ☐ Point in Polygon test
- ☐ Pick's Theorem
- ☐ Closest pair of points