Competitive Programming

Sites to Practice/Compete

There are many sites where you can practice and develop your CP skills. Here are some of the most well-known practicing and competing sites:

- Codeforces
- AtCoder
- CodeChef
- CSES
- LeetCode
- Binary Search
- HackerRank
- HackerEarth
- SpOJ
- Google's Coding Competitions
- CS Academy
- Kattis
- TopCoder
- CodeWars
- Project Euler
- Timus
- POJ
- Toki
- USACO
- Library Checker
- CodinGame

These sites provide world-class resources for training and any hardworking individual can make it big with continuous practice and effort. To stay up-to-date about upcoming contests, one can use this site.

Resources

From beginner level content to really advanced DSA and techniques, these are some of the most well-known resources one can refer to.

Reading

- CP Algorithms
- Introduction to Algorithms - CLRS
- The Algorithm Design Manual - Skiena
- Algorithms - Sedgewick
- DSA Dictionary
- CP Handbook - Antti Laaksonen
- Principles of Algorithmic Problem Solving
- Competitive Programming 2 - Steven and Felix Halim
- Performance Engineering

- Hitchhiker's Guide to Programming Contests
- Computation Geometry
- Introduction to Probability
- Linear Algebra and its Applications
- Geeks for Geeks

Watching

- William Fiset
- MIT OCW Introduction to Algorithms
- MIT OCW Advanced Algorithms
- Errichto
- SecondThread
- Galen Colin
- Algorithms Live
- Tushar Roy
- Gaurav Sen
- code_report
- Harvard CS50
- Jenny's Lectures
- FreeCodeCamp

Extras

- Literally everything...
- Personal CP Blog of Shahjahal Shohag
- Codeforces Problem list by Topic
- DP Resource list
- CP Wiki
- Short statement, cool problems
- Kactl
- Binary search is the only algorithm required for reaching Grandmaster