



Competitive Programming 101

LEC01

MYTH NUMBER 1

**Having DS and Algorithm
knowledge isn't necessary for
“real” software development**



Companies that think CC is impressive

The Facebook logo, consisting of the word "facebook" in white lowercase letters on a dark blue rectangular background.

facebook®

The Goldman Sachs logo, featuring the words "Goldman Sachs" in white serif font on a blue rectangular background.

Goldman
Sachs

The American Express logo, featuring the words "AMERICAN EXPRESS" in white serif font on a blue rectangular background.

AMERICAN
EXPRESS

The Netflix logo, featuring the word "NETFLIX" in white bold sans-serif font with a black drop shadow on a red rectangular background.

NETFLIX



Why are we all here?

- Profile Building - Make your resume look good!
- Better debugging skills
- Get better at solving all sorts of technical problems, not just programming
- Get to know your favourite programming language better
- Most importantly, for the fun of it

20,000+ Problems

On CodeChef, HackerRank, HackerEarth, LeetCode, CodeForces and so on



Syllabus

98% of these problems come under

- Searching and Sorting
- Pattern Recognition and Sets
- Greedy Algorithms
- Mathematical and Logical (AND/OR/XOR) Operations
- Tree/Graph Manipulation
- Dynamic Programming

Challenges

- It's not hard to get the correct answer. You'll see this as we cover problems
- But the biggest showstopper that you'll come across will be



TLE

(Time Limit Exceeded)

When your code works but time limit is exceeded





The Process

- We'll teach a topic once/twice a week, with real examples
- We'll give you example problems to solve, that we'll reveal the solutions to eventually
- Doubts will be solved during the class, in person, or online via our Issue Tracker (More on that coming up)
- We'll host regular competitions weekly or fortnightly where you can compete with each other to get a hold of where you are skill wise
- We'll host contests with prizes now and then throughout the year (called PrimeTime)



Materials!

- All software installation details, materials for each class, contest results, doubt tracking and chapter announcements can be found at

github.com/amithkk/cc_materials



IDE Of Choice

- For all our classes we'll be using VSCode with the IORun extension.
- You are free to use any IDE that you're comfortable with
- We'll cover installation and help you guys with any problems you'll face next class.
- More details on github

Let's Begin!
