AL-Gore-Rhythmic Ascent

Indian Institute of Technology Bombay
Summer/Seasons of Code (SoC) - 2025

Master Problem Solving • Build Strong Foundations • Compete with Confidence

Welcome!

✨ **Gear Up for an Intense & Fun Summer of Coding!**

> “The only way to learn a new programming language is by writing programs in it.” — Dennis Ritchie

🌞 Welcome to the DSA & Competitive Programming Summer Course

Meet us

Sonusree Banothu

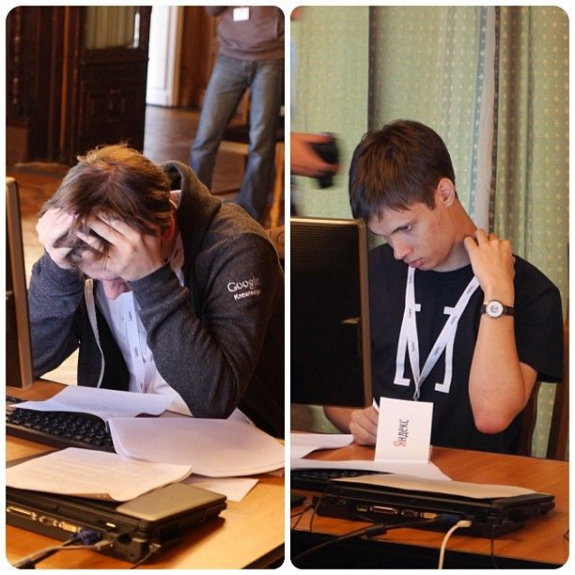
Upcoming Junior in the Computer Science and Engineering Dept.

Aditya Sanapala

Upcoming Junior in the Computer Science and Engineering Dept.

What *is* Competitive Programming?

- A mind sport where individuals/teams compete to solve problems within a specific time limit.



Petr Mitrichev (left) and Gennady Korotkevich (right), in the 2013 Yandex Algorithm Cup

Tip

Don't chase problems—chase patterns. One "aha!" moment beats ten brute-force wins.

But, why?

- You can train your brain to solve puzzles under pressure — think smarter, not just faster.
- In today's tech-driven world, the ability to **think algorithmically**, **solve problems efficiently**, and **write clean, optimized code** is what sets great programmers apart.
- You can stand out at Google, Meta, and more — where every second (and semicolon) counts (basically, (F/M)AANG).
- well, if anything, it does improve your problem solving ability and logical thinking to say the least…

But before we go ahead,

DSA/Algo

Data Structures: Techniques for organizing and storing data in ways that make it easy to access and modify.

Algorithms: Step-by-step procedures or formulas for solving problems efficiently and optimizing performance.

Free world, Free language!

- Usually, we can do all of these in any language - the more rudimentary the language, the harder it gets.
- But you don’t go around doing CP in **asm** right?
- Your programming language is like your starter pokemon - you have to choose wisely.
- So I give you 3 options - C/C++, Java and Python. Choose your starter pokemon!

Once again, Welcome here!

- Meetings will be held once a week.
- Weekly assignments will be uploaded on the repo on wednesdays.
  https://github.com/adityasanapala/SoC-Al-Gore-Rhythmic-Ascent

- Join the WhatsApp group if you haven’t yet!
  https://chat.whatsapp.com/LYJlYb3JlDQAw6AKUgIHWA

- Submissions will be via Google Forms.
- Most importantly, enjoy while you are here, and have a great summer!

Thank you & Good luck!

For more about collaborating with us/sharing your ideas, reach out on WhatsApp