

Coding

10 things to need to know before starting coding

1. Product Based Companies (Google, Microsoft ...) ask for DSA (It is a standard way of testing logic and command over programming) in both interviews and coding rounds.
2. Don't do multiple things at once. Focus on one at the max 2 things at a time.
3. Find your pack (A group of good and like-minded people with same interests).
4. There is no best technology so master whichever technology you are learning.
5. Tutorial hell – Try to think on your own, don't just copy any code and make a project. Give it your own twist.
6. Go to internet and do research of things you have learnt.
7. Don't just do it for certificate (Internship or any online course).
8. Don't go for multiple platforms (Hacker Rank, Code Chef, LeetCode, etc.) (Max 2 at a time).
9. Use GitHub and LinkedIn, showcase your learning journey.
10. Build a problem-solving mindset. Do it by yourself. Never depend upon others to come and solve your problem.

How to start coding?

1. Decide what you want to prepare for. (Placements or Development).
2. Choose a language based on what you want to prepare for.
3. Learn basics of the language chosen.
4. Build projects (Start simple).

5 things to know as a beginner in programming

1. Our first language is not our last language.
2. Having good communication skills is very important.
3. Focus on making good projects, not on language.
4. There is no perfect code. Get your 1st version ready (Brute Force code) then focus on improving it.
5. Software Engineering can be interesting as well as boring.

Skills you must have to become a great coder

1. Learning attitude.
2. Make a time table. Be consistent. No gap of more than 3 days.
3. Good sitting habit.
4. Don't compare, focus on your coding goal.
5. Fast is the new strong, adapt with the new changes in technology.

Things to know as a coder

1. Figure out things by yourself.
2. Solve your own problems by yourself.
3. Know the correct oath for your goal.

4. Don't do too much work in small period of time rather be consistent.
5. Have a mentor

Logic Building and improving coding skills

"If I had 1 hour to chop down a tree, I would take 45 mins to sharpen my axe"

1. Concepts >> Contests

Focus on improving concepts rather than focusing on rankings and ratings of the contest.

Concepts → Solve at least 375 questions of DSA and medium level questions of trees and graphs.

2. Thinking >> Coding

Coding without thinking is just typing.

Thinking → Read the question, take pen and paper and try to solve the problem, think of any corner cases where the code might get struck, test the solution with 2 sample inputs.

3. Step-by-step

Brute Force (Basic approach) → Time complexity → Space complexity.

4. Practice

3 days rule (Do not spend 2 days without coding).

Minimum 1 hour of coding each day.

5. Move on

Easy problems (5-10 mins) → Medium problems (15-20 mins) → Hard problems (40-60 mins).

6. Solve puzzles (Sudoku...)

7. Solve one easy problem on a daily basis (Leet Code, Hacker Rank, ...)

Make a weekly project.

Make a new project every month on your own of your own idea (It will test your creativity).

8. Try to solve other people problems (Stack Overflow, Facebook groups).

9. Make a personal repository of the code base you are writing on Git Hub and try to add notes in it too (What did you learn, your take aways).
-

CODING PLATFORMS

Beginners

- ➔ HackerRank
- ➔ Hacker Earth
- ➔ GeeksforGeeks

Placement / Interview preparation

- ➔ LeetCode
- ➔ InterviewBit

Competitive Programming

- ➔ CodeChef
 - ➔ Codeforces
-