

ROADMAP TO THE TECH-GIANTS

01 Learn a Programming Language



02 Data Structure and Algorithms



03 Contest Participation



04 Work on own projects



05 Prepare Theory Section



06 Revision Stage

STEP 1

GET A GOOD HOLD
OVER A
PROGRAMMING
LANGUAGE

LEARN C

Book - Let us C by Yashwanth Kanetkar
YouTube - Saurabh Shukla Sir

This 2-Step learning may take more time, but
worth the trouble

C++

Book - Balagurusamy
YouTube - Saurabh
Shukla Sir,
CodeWithHarry

JAVA

Books-
Java: The Complete
Reference,
Head First Java

PYTHON

Least
preferred language for
this field.

Practice the question related to the chosen language on GFG.
You can also go through the articles provided on GFG/Tutorialspoint.

STEP 2

DATA STRUCTURES AND ALGORITHMS

How to proceed?



Start with the book by KARUMANCHI SIR for a stronger foundation. Go through the YouTube video links provided in the drive to get your concepts cleared



START PRACTICING ON GFG WITH THE BASIC, EASY AND MEDIUM FILTERS FOLLOWING THE TOPIC CHART

Start with getting your concepts cleared on **TIME COMPLEXITY**.

Then, go with **BASIC MATHEMATICS QUESTIONS** which include finding prime number, gcd, etc.

DATA STRUCTURES



LINKED LIST



STACKS



QUEUES



HEAP

YouTube -
Ravindrababu Ravula



TREES



STL LIBRARY
(Map, Vector,
Set, Pair)



GRAPH

Practice standard
questions only
(from Karumanchi)



HASH TABLE



ADVANCE DS
(TRIES)

STEP 2

DATA STRUCTURES AND ALGORITHMS

PUZZLES:-

Whenever you feel exhausted while practicing the questions, JUST GO TO THE PUZZLES SECTION OF CFG and try them out without going to the solutions directly, (Several companies ask PUZZLES for assessing candidates for their organization)

ALGORITHMS

SEARCHING &
SORTING

GREEDY

RECURSION &
BACKTRACKING

GRAPH BASED
ALGOs

Divide and
Conquer

DYNAMIC
PROGRAMING

YouTube-
Aditya Verma

NOTE:

- PRACTICING more and more is the only tip to master DSA.
- Consistently work on your LOGIC TO THE CODE CONVERSION SKILLS along with the TIME MANAGEMENT.

STEP 3

CONTEST
PARTICIPATION

STEP 4

PROJECT WORK

WAY TO BECOME A PRO

Once you get a good command over basic DSA concepts, you can refine it further by practicing on INTERVIEW BIT along with taking part in contests held on various platforms like HACKERRANK, CODECHEF, CODEFORCES, HACKEREARTH, LEETCODE

NOW, YOU ARE ON THAT STAGE WHERE YOU CAN
REDUCE YOUR TIME INVESTMENT ON DSA.

Get an idea about the technologies related to your field via short videos on you tube. Then, decide the technology which matches your skill and interest.

LEARN THAT
SKILL

Prepare your own
GENUINE PROJECT

STEP 5

THEORY SUBJECTS

NOTE:

Refer to the video links provided in the last slide.
Then, you can refer to the articles provided by GFG for the same.

SUBJECTS FOR INTERVIEWS

- OOPS CONCEPTS
- OPERATING SYSTEMS
- DBMS
- NETWORKING
- SYSTEM DESIGN
- TESTING

END GAME

Go through the
Pre Placement
course
on GFG

Revise the
notes of
OOPs, OS
DBMS ...

Prepare
yourself for
top 10 HR
questions

Frame 5 good
question on your
project with
answers

THE following is the google drive link to all the resources mentioned in the roadmap:

<https://drive.google.com/drive/folders/1d5DLFS0vUIBfk-PDKvZelCZEy1aOChXD?usp=sharing>

THANK YOU!

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