# YOUR ONE-STOP PLACEMENT GUIDE - By Nishant Chahar

#### C++ Resources:

- https://www.learncpp.com/
- https://youtube.com/playlist?list=PLLYz8uHU480j37APNXBdPz7YzAi4 XIQUF

## • Python:

- https://youtu.be/8DvywoWv6fl
- https://realpython.com/ o https://docs.python.org/3

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#### Java:

- https://www.udemy.com/course/object-oriented-programming-oops-for-j ava-certification/?start=0
- https://www.youtube.com/watch?v=aQatrXw0njs
- https://www.youtube.com/watch?v=ntLJmHOJ0ME&list=PLu0W\_9III9a qS67Uits0UnJyrYiXhDS6q

## Javascript

- https://www.youtube.com/watch?v=pN6jk0uUrD8&list=PLlasXeu85E9c
   Q32gLCvAvr9vNaUccPVNP
- https://www.youtube.com/watch?v=2md4HQNRqJA&list=PLRAV69dS1 uWSxUlk5o3vQY2- VKsOpXLD

#### DSA

## • Abdul bari Sir (Algos)

https://www.youtube.com/watch?v=0IAPZzGSbME&list=PLDN4rrl48XKpZkf03iYFl-O 29szjTrs O&ab channel=AbdulBari

- Dynamic Programming Watch the complete tutorial for Dp on youtube by Aditya Verma
  - https://www.youtube.com/watch?v=ngowUJzG-

iM&list=PL z 8CaSLPWekqh dCPmFohncHwz8TY2Go&ab channel=AdityaVerma •

#### **GFG TOP 20 DP questions**

<a href="https://www.geeksforgeeks.org/top-20-dynamic-programming-interview-questi">https://www.geeksforgeeks.org/top-20-dynamic-programming-interview-questi</a>
 ons/

## • Practice Qns on Dp section-wise on leetcode

- https://leetcode.com/discuss/general-discussion/662866/DP-for-Beginners-Pr oblems-or-Patterns-or-Sample-Solutions
- <a href="https://leetcode.com/discuss/general-discussion/1050391/must-do-dynamic-programming-problems-category-wise">https://leetcode.com/discuss/general-discussion/1050391/must-do-dynamic-programming-problems-category-wise</a>
- https://leetcode.com/discuss/general-discussion/458695/Dynamic-Programmi

#### ng-Patterns • InterviewBit

https://www.interviewbit.com/courses/programming/topics/dynamic-programming/

### Backtracking

- https://www.youtube.com/watch?v=DKCbsiDBN6c&ab channel=AbdulBari
- https://www.youtube.com/watch?v=xFv\_HI4B83A&ab\_channel=AbdulBari
- <a href="https://www.interviewbit.com/courses/programming/topics/backtracking/">https://www.interviewbit.com/courses/programming/topics/backtracking/</a>
- https://www.geeksforgeeks.org/top-20-backtracking-algorithm-interview-questions/

### More practice questions on Backtracking:

- https://leetcode.com/problems/the-k-th-lexicographical-string-of-all-happy-strings-of-length-n/
- https://leetcode.com/problems/permutations/
- https://leetcode.com/problems/letter-case-permutation/
- https://leetcode.com/problems/generate-parentheses/
- o https://leetcode.com/problems/combination-sum-iii/
- https://leetcode.com/problems/combination-sum/
- https://leetcode.com/problems/palindrome-partitioning/
- https://leetcode.com/problems/combination-sum-ii/
- https://leetcode.com/problems/permutations-ii/
- https://leetcode.com/problems/letter-combinations-of-a-phone-number/
- https://leetcode.com/problems/restore-ip-addresses/
- https://leetcode.com/problems/n-queens-ii/
- o <a href="https://leetcode.com/problems/n-queens/">https://leetcode.com/problems/n-queens/</a>
- <a href="https://leetcode.com/problems/sudoku-solver/">https://leetcode.com/problems/sudoku-solver/</a>
- https://leetcode.com/problems/regular-expression-matching/
- https://leetcode.com/problems/word-ladder-ii/

## Greedy

- Watch recording if you are a beginner
- https://www.youtube.com/watch?v=HzeK7g8cD0Y&list=PLqM7alHXFySESatj 68JKWHRVhoJ1BxtLW&ab\_channel=GeeksforGeeks

## Solve All problems

- https://www.interviewbit.com/courses/programming/topics/greedy-algorithm/
- 1. Activity Selection
- 2. N meetings in one room
- 3. Coin Piles
- 4. Maximize Toys

- 5. Page Faults in LRU
- 6. Largest number possible
- 7. Minimize the heights
- 8. Minimize the sum of product
- 9. Huffman Decoding
- 10. Minimum Spanning Tree
- 11. Shop in Candy Store
- 12. Geek collects the balls
- 13. <a href="https://leetcode.com/problems/last-stone-weight/">https://leetcode.com/problems/last-stone-weight/</a>
- 14. <a href="https://leetcode.com/problems/gas-station/">https://leetcode.com/problems/gas-station/</a>

## For those DSA, complete all questions from Interviewbit and must do coding questions from GFG

- <a href="https://www.geeksforgeeks.org/must-do-coding-questions-for-companies-likeamazon-microsoft-adobe/">https://www.geeksforgeeks.org/must-do-coding-questions-for-companies-likeamazon-microsoft-adobe/</a>
- https://www.interviewbit.com/courses/programming/

## For Online Test a little bit of CP IS REQUIRED So, PARTICIPATE IN ALL LEETCODE CONTEST. OTHER RESOURCES:--

For recursion:

- <a href="https://www.techiedelight.com/recursion-practice-problems-with-solutions/">https://www.techiedelight.com/recursion-practice-problems-with-solutions/</a>
  Solve all problems
  - https://www.youtube.com/channel/UCmJz2DV1a3yfgrR7GqRtUUA
  - https://www.youtube.com/channel/UCYvQTh9aUgPZmVH0wNHFa1A
  - https://www.youtube.com/channel/UCZCFT11CWBi3MHNIGf019nw
  - https://www.youtube.com/channel/UCWSYAntBbdd2SLYUqPIxo0w

## You can find solutions to leetcode and gfg problems on

- Take U Forward: https://www.youtube.com/channel/UCJskGeByzRRSvmOyZOz61ig
- Pepcoding: https://www.youtube.com/channel/UC7rNzgC2fEBVpb-g\_acpsmw
- Lead Coding: https://www.youtube.com/channel/UC81Q2wnuk5KqOFVgAbq4nUw

DP CP <a href="https://www.youtube.com/watch?v=FAQxdm0bTaw">https://www.youtube.com/watch?v=FAQxdm0bTaw</a>
<a href="https://atcoder.jp/contests/dp">https://atcoder.jp/contests/dp</a>

Binadry Search: <a href="https://www.youtube.com/watch?v=GU7DpgHINWQ">https://www.youtube.com/watch?v=GU7DpgHINWQ</a>

Learn Time Complexity: https://youtu.be/luXiytGnYpY Topic-wise links: 1. Arrays -Bare Minimum a. https://www.geeksforgeeks.org/top-50-... -Bonus a. https://www.interviewbit.com/courses/... b. https://leetcode.com/tag/array/ 2. Strings -Bare Minimum a. https://www.interviewbit.com/courses/... -Bonus a. https://leetcode.com/tag/string/ b. https://www.hackerrank.com/domains/al... 3. Linked Lists -Bare Minimum a. https://www.interviewbit.com/courses/... -Bonus a.

https://leetcode.com/tag/linked-list/ b. https://www.geeksforgeeks.org/top-20-... 4. Stacks and Queues -Theory: a. https://www.geeksforgeeks.org/stack-d... b.

https://www.geeksforgeeks.org/queue-s... -Bare Minimum a.

https://www.interviewbit.com/courses/...-Bonus a. https://leetcode.com/tag/stack/b.

https://leetcode.com/tag/queue/ c. https://www.geeksforgeeks.org/queue-d... d.

https://www.geeksforgeeks.org/stack-d... 5. Tree-based data structures: -Theory: a.

https://www.geeksforgeeks.org/binary-... b. https://www.geeksforgeeks.org/binary-... c.

https://www.geeksforgeeks.org/trie-in... d. https://www.geeksforgeeks.org/heap-da... e.

https://www.geeksforgeeks.org/hashing...-Bare minimum: a.

https://www.interviewbit.com/courses/... b. https://www.interviewbit.com/courses/... c.

https://www.interviewbit.com/courses/...-Bonus a. https://leetcode.com/tag/tree/b.

https://leetcode.com/tag/heap/ c. https://leetcode.com/tag/trie/ d.

https://leetcode.com/tag/hash-table/ 6. Graphs: -Theory: a.

https://www.geeksforgeeks.org/graph-a... -Standard Algos: a. BFS -

https://www.geeksforgeeks.org/breadth... b. DFS - https://www.geeksforgeeks.org/depth-

f... c. Dijkstra - https://www.geeksforgeeks.org/dijkstr... d. Prim's -

https://www.geeksforgeeks.org/prims-m... e. Kruskal -

https://www.geeksforgeeks.org/kruskal... f. Floyd-Warshall -

https://www.geeksforgeeks.org/floyd-w... g. Union Find -

https://www.geeksforgeeks.org/union-f... -Bare Minimum: a.

https://leetcode.com/tag/graph/ (Easy and Medium) -Bonus: a.

https://www.interviewbit.com/courses/... 7. Dynamic Programming: -Video lectures: a. Lec 1

- https://www.youtube.com/watch?v=0Q5js... b. Lec 2 -

https://www.youtube.com/watch?v=ENyox... c. Lec 3 -

https://www.youtube.com/watch?v=ocZMD... -Bare minimum (Standard problems): a.

https://www.geeksforgeeks.org/program... b. https://www.geeksforgeeks.org/0-1-kna... c.

https://www.geeksforgeeks.org/coin-ch... d. https://www.geeksforgeeks.org/compute... e.

https://www.geeksforgeeks.org/longest... f. https://www.geeksforgeeks.org/longest... g.

https://www.geeksforgeeks.org/longest... -Bonus: a.

https://www.interviewbit.com/courses/... b. https://leetcode.com/tag/dynamic-prog...