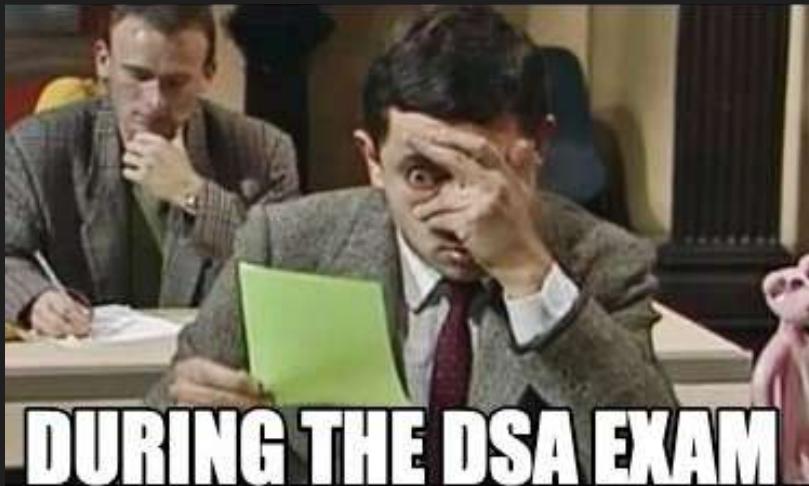


DSA Orientation

DSA ROUNDS 😊



NEXT 6 MONTHS >>> DSA



ABOUT ME

- Lead Instructor - **100xSchool**
- Ex - Scaler, Achieve.ai, Unacademy, Coding Ninjas
- Candidate Master Codeforces (2000+)
- 6★ Codechef (2200+)
- Top 0.07% LeetCode (2700+)
- 2x **ICPC** Regionalist (2022, 2023)



 DhruvPasricha



_DhruvPasricha

100x
school

SYLLABUS

- Introduction to C++
- Loops and Pattern Printing
- Arrays / 2D Arrays
- Strings
- Sorting and Searching
- Pointers / Pass by val, ref & add
- Time and Space Complexity
- Sets and Maps
- Prefix Sums, Sliding Window, Contribution
- Bit Manipulation
- Number Theory Basics
- Recursion and Backtracking
- Two Pointers
- Linked List
- Stack / Queue / Deque
- Binary Tree / BST
- Priority Queue / Heap
- Trie
- Greedy
- Dynamic Programming
- Graphs
- Segment Tree / Ordered Set

WHAT'S THE PLAN?

Class

One live class per week, Thursday: 8 PM - 10 PM

Assignments

Practice problems after every class. (Codeforces / Leetcode)

Contest

Practice contest after every 2 weeks, Wednesday: 8 PM - 10 PM

EXPECTATIONS

Be Consistent

Attend every class and complete the assignments sincerely.

Ask for Help

If you're stuck, don't stay silent. Post your doubts in the discord.

Prioritize Revision

Maintain a revision doc and solved problems sheet – this is crucial for long-term retention.

SAMPLE REVISION SHEET

A	B	C	D	E	F	G
DSA Problems	Problem Link	Topic	Idea	What I did wrong	Status	Revisit ?
Two Sum	leetcode.com/problems/two-sum	Arrays	Check pairs using map	Forgot indices	Solved (No help)	No
Palindrome Number	code.com/problems/palindrome	Math	Reverse number and compare	Negative case missed	Solved (With help)	Yes
Valid Parentheses	code.com/problems/valid-parentheses	Stack	Use stack to match	Forgot empty check	Solved (No help)	No
Remove Duplicates	/problems/remove-duplicates	Arrays	Use two pointers	Index confusion	Unsolved	Yes
Merge Lists	code.com/problems/merge-two-linked-lists	Linked List	Compare and move pointers	Lost next pointer	Solved (With help)	Yes
Maximum Subarray	code.com/problems/maximum-subarray	Arrays	Kadane, Keep best sum so far	Reset logic wrong	Solved (No help)	Yes
Contains Duplicate	code.com/problems/contains-duplicate	Arrays	Use set to check	Didn't know set	Solved (No help)	No
Reverse String	leetcode.com/problems/reverse-string	Strings	Swap from both ends	Loop mistake	Solved (With help)	No
Buy & Sell Stock	code.com/problems/best-time-to-buy-and-sell-stock	Arrays	Track min price	Wrong comparison	Solved (With help)	No
Fizz Buzz	leetcode.com/problems/fizz-buzz	Basics	Check divisibility	Order mistake	Unsolved	Yes

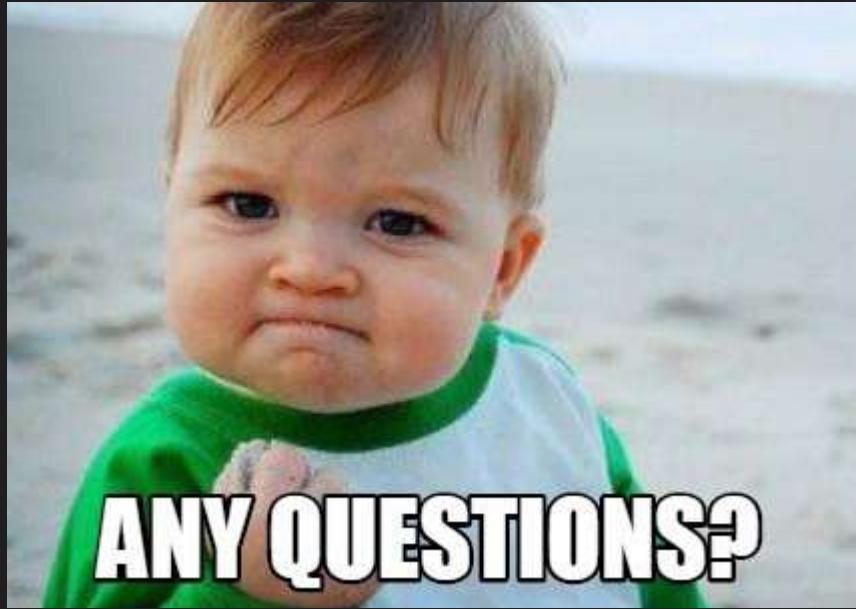
COMMON MISTAKES TO AVOID

START CODING WITHOUT HAVING A SOLUTION IN MIND.

COMPARING YOUR PROGRESS WITH OTHERS.

CHASING SHEETS INSTEAD OF UNDERSTANDING.

GIVING UP TOO EARLY.



ANY QUESTIONS?

- 1) Codeforces Div 3 and 4 contest
- 2) Atcoder beginner contest
- 3) Leetcode weekly and biweekly contests