***📅 ৩০ দিনের Python Problem Solving চ্যালেঞ্জ (FAANG ফোকাস)***

**নিয়ম:**

* প্রতিদিন ১-২ ঘণ্টা সময় দাও
* প্রথমে ১০-১৫ মিনিট syntax ঝালাই করো (যদি লাগে)
* Problem solve করার আগে paper/pen দিয়ে logic লিখে নাও
* LeetCode-এ solve করো, Python 3 বেছে নাও

**📍 Week 1 — Python Basics + Easy Problems**

**লক্ষ্য:** Python syntax + basic problem-solving flow আয়ত্ত করা  
**Topics:** Variables, loops, conditions, lists, strings, functions

**Day 1**

* Python setup + basic I/O
* Problem: "Sum of Two Numbers"
* Problem: "Find Max in List"

**Day 2**

* Loops + Conditional practice
* Problem: "Odd or Even"
* Problem: "Count Vowels in a String"

**Day 3**

* List & String manipulation
* Problem: "Reverse String"
* Problem: "Palindrome Check"

**Day 4**

* Functions
* Problem: "Factorial of a Number"
* Problem: "Fibonacci Series"

**Day 5**

* List comprehensions
* Problem: "Squares of Numbers in List"
* Problem: "Filter Even Numbers"

**Day 6**

* Nested loops
* Problem: "Multiplication Table"
* Problem: "Pattern Printing"

**Day 7**

* Weekly revision + 3 Easy LeetCode problems

**📍 Week 2 — Arrays & Hashing**

**লক্ষ্য:** FAANG interviews-এর সবচেয়ে সাধারণ section

**Day 8** — Arrays Basics

* Problem: "Running Sum of 1D Array" (LeetCode #1480)
* Problem: "Maximum Number in List"

**Day 9** — HashMap Basics

* Problem: "Two Sum" (LeetCode #1)
* Problem: "Contains Duplicate" (LeetCode #217)

**Day 10** — Frequency Count

* Problem: "Valid Anagram" (LeetCode #242)

**Day 11** — Prefix Sum

* Problem: "Subarray Sum Equals K" (LeetCode #560)

**Day 12** — Sliding Window Basics

* Problem: "Best Time to Buy and Sell Stock" (LeetCode #121)

**Day 13** — Practice Day

* 4 Easy + 1 Medium array problems

**Day 14** — Weekly revision

**📍 Week 3 — Two Pointers & Strings**

**লক্ষ্য:** Interview favorite problems

**Day 15**

* Problem: "Valid Palindrome" (LeetCode #125)
* Problem: "Move Zeroes" (LeetCode #283)

**Day 16**

* Problem: "Reverse Words in a String" (LeetCode #151)

**Day 17**

* Problem: "Remove Duplicates from Sorted Array" (LeetCode #26)

**Day 18**

* Problem: "Merge Sorted Array" (LeetCode #88)

**Day 19**

* Problem: "Longest Substring Without Repeating Characters" (LeetCode #3)

**Day 20** — Practice Day

* 5 Easy string/array problems

**Day 21** — Weekly revision

**📍 Week 4 — Stack, Queue, Recursion**

**লক্ষ্য:** DSA-এর পরবর্তী স্তরে যাওয়া

**Day 22** — Stack Basics

* Problem: "Valid Parentheses" (LeetCode #20)

**Day 23** — Queue Basics

* Problem: "Implement Queue using Stacks" (LeetCode #232)

**Day 24** — Recursion Basics

* Problem: "Factorial" (recursive)
* Problem: "Fibonacci" (recursive)

**Day 25** — More Stack Problems

* Problem: "Min Stack" (LeetCode #155)

**Day 26** — Recursion Practice

* Problem: "Power of Two" (LeetCode #231)

**Day 27** — Mix Practice

* 3 Easy + 1 Medium stack/recursion problem

**Day 28** — Revision + Timed Practice (simulate interview)

**Day 29** — Final Easy + Medium Mix

* Pick 5 random problems from NeetCode 150 (Easy + Medium)

**Day 30** — Mock Interview

* Pick 2 Medium problems, solve in 45 minutes total