Here's a **30-Day Plan** to build your **programming skills, DSA**, and **problem-solving ability** for coding interviews. The focus is on **Java** (since you're preparing for a Java test), but if you want **Python**, let me know!

## **▶** 30-Day Coding Interview Preparation Plan

#### **#** Goals

- ✓ Strengthen Java programming skills
- ✓ Build Data Structures & Algorithms (DSA) foundation
- ✓ Solve 100+ problems on LeetCode
- ee Improve **problem-solving speed**
- **⊘** Gain confidence for interviews

### 🎹 Week 1: Java Basics & Easy DSA (Warm-up)

- **♦ Day 1-2: Java Fundamentals** 
  - Learn variables, loops, functions, OOP basics
  - Practice on HackerRank Java Practice
    - ★ Java Basics GeeksforGeeks
    - ★ HackerRank Java
- **♦ Day 3: Arrays & Strings (LeetCode Easy)** 
  - Solve 5 problems on Arrays & Strings
    - ★ NeetCode Array Playlist
    - ★ LeetCode Arrays Problems
- **♦ Day 4: Hashmaps & Sets** 
  - Solve **5 problems** on **Hashmaps** 
    - ★ NeetCode Hashmap Playlist
- **♦ Day 5: Recursion & Backtracking (Basic)** 
  - Learn Recursion basics

- Solve 2-3 recursion problems
  - Recursion GFG
- **♦ Day 6: Linked List (Basic & Medium Problems)** 
  - Solve 5 Linked List problems
    - ★ LeetCode Linked List Problems
- **♦ Day 7: Review & Contest Day** 
  - Solve 2-3 problems from past days
  - Join a contest on Codeforces

## **Week 2: Intermediate DSA & Time Complexity**

- **♦ Day 8: Stacks & Queues**
- ★ LeetCode Stacks & Queues
- ★ NeetCode Stacks & Queues
- **Day 9-10: Trees (Binary Tree + BST)**
- ★ LeetCode Trees
- ★ Binary Trees NeetCode
- **♦ Day 11: Graph Basics (DFS & BFS)**
- ★ Graph Algorithms GFG
- ★ Graph Traversals NeetCode
- **♦ Day 12: Sorting Algorithms**
- ★ Sorting GFG
- **♦ Day 13: Binary Search & Searching Algorithms**
- ★ Binary Search LeetCode
- **♦ Day 14: Review & Mock Interview**
- **★** Join a mock interview on Pramp

# **Week 3: Dynamic Programming (DP) & Advanced Topics**

- **♦ Day 15: Introduction to Dynamic Programming (DP)**
- ★ DP Concepts Striver
- **♦ Day 16-18: Solve 8+ DP problems (Easy & Medium)**
- ★ LeetCode DP Questions
- **♦ Day 19: Tries (Prefix Trees)**
- ★ Trie NeetCode
- **♦ Day 20: Sliding Window & Two Pointers**
- ★ Sliding Window LeetCode
- **♦ Day 21: Codeforces Contest & Review**
- ★ Solve problems in a timed manner

### **Week 4: Mock Interviews & System Design**

- **♦ Day 22-23: Advanced Graphs (Dijkstra, Floyd-Warshall, MST)**
- ★ Graph Advanced GFG
- **♦ Day 24: Problem Solving Under Time Pressure**
- ★ Solve 5 LeetCode Medium & Hard problems in 2 hours
- **♦ Day 25-26: System Design Basics**
- ★ Grokking System Design
- **♦ Day 27: Mock Interviews (Interviewing.io)**
- ★ Mock Interviews Interviewing.io
- **♦ Day 28-30: Final Revision & Practice Interviews**
- **★** Solve problems based on past mistakes
- **★** Join a contest on LeetCode/Codeforces

## M Summary: What You'll Achieve in 30 Days

- ✓ Learn Java & DSA from scratch
- Solve 100+ LeetCode problems
- ✓ Build speed & confidence for coding interviews

## **♦** Next Steps After 30 Days

- Continue solving 1-2 problems daily on LeetCode
- Start applying for **Software Engineer roles**
- Practice mock interviews every week
- 🌢 Are you ready to start today? Let me know if you need changes! 🗷