# 🗓 50-Day Plan with Contest Calendar

### ⏰ Daily Rhythm (4–5 hrs/day)

* **Morning (1 h):** Theory & warm-ups (InterviewBit / HackerRank)
* **Midday (2 h):** Focused practice (LeetCode / CodeChef)
* **Evening (1–2 h):** Live contest or mock interview

**Tip:** Block “no-phone” coding sprints (25 min work, 5 min break).

## Weekly Contest Grid

| Platform | Contest Type | Frequency | Duration |
| --- | --- | --- | --- |
| **Codeforces** | Div. 3 | Every Sunday (18:35 UTC) | 1.5 h |
|  | Div. 2 | Bi-weekly on Saturday | 2 h |
|  | Div. 1+2 Combined | Monthly Wednesday | 2 h |
| **CodeChef** | Long Challenge | 10 days / month | 10 days total |
|  | Starters | Monthly (first weekend) | 2 days |
|  | Lunchtime | Monthly mid-month | 3 h |
| **LeetCode** | Weekly Contest | Every Saturday | 1 h |
|  | Bi-weekly Contest | Every other Sunday | 1.5 h |

Slot your “Evening” coding into whichever contest falls that day, or swap in a mock if none are live.

## 🗓 Week 1 (Days 1–7): Fundamentals + CF Div 3

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 1 | Arrays & Two-Ptrs (IB) | 5× HR easy arrays | CF Div 3 (Sunday) |
| 2 | Strings & Prefix-Sum (IB) | 5× LC Easy strings | LeetCode Weekly (Saturday) |
| 3 | Linked Lists (HR track) | 5× CC Starters easy | CF Div 3 |
| 4 | Binary Trees intro (IB) | 4× LC Easy BT problems | — (Mock mini-contest) |
| 5 | Recursion fundamentals | 5× HR recursion | CF Div 3 |
| 6 | Debugging & edge-cases (IB) | 5× mixed easy | CodeChef Lunchtime (mid-month) |
| 7 | **Mock (6 mixed)** | — | Editorial deep-dive |

## 🗓 Week 2 (8–14): Graphs + CF Div 3 & Div 2

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 8 | Graph basics (IB) | 4× HR BFS/DFS | CF Div 3 |
| 9 | BFS & DFS impl. | 4× LC Easy graph | LeetCode Bi-weekly (Sunday) |
| 10 | Dijkstra (IB) | 4× CC medium Dijkstra | CF Div 3 |
| 11 | CC & tree dp | 4× HR cc/tree-dp | CodeChef Starters (weekend begins) |
| 12 | Topo sort & cycle detect | 4× LC Easy graph topo | CF Div 2 (bi-weekly Saturday) |
| 13 | Mixed graph (8 probs) | — | — (Mock) |
| 14 | **Mock (6 graph)** | — | Editorial debrief |

## 🗓 Week 3 (15–21): DS & CF Maintenance

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 15 | Stacks & Queues (IB) | 5× LC Easy DS | CF Div 3 |
| 16 | Hashmaps & Heaps (IB) | 5× HR hash/heap | CodeChef Lunchtime |
| 17 | Fenwick Tree intro | 4× CC medium BIT | CF Div 3 |
| 18 | Segment Tree basics | 4× LC Medium segtree | LeetCode Weekly |
| 19 | Sliding Window rev. | 5× mixed medium | CF Div 3 |
| 20 | Mock CF Div 2 (4 probs) | — | Editorial + speed-up |
| 21 | **Mock (6 DS)** | — | Edge-case hunt |

## 🗓 Week 4 (22–28): DP Basics + Mixed Contests

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 22 | 1D DP patterns (IB) | 5× HR DP basics | CF Div 3 |
| 23 | 2D DP & Knapsack (IB) | 5× LC Medium DP | CodeChef Lunchtime |
| 24 | Tree DP refresher | 4× CC DP problems | CF Div 3 |
| 25 | Bitmask DP intro | 4× HR bitmask DP | LeetCode Bi-weekly |
| 26 | DP opt. tricks (IB) | 4× LC Medium | CF Div 2 |
| 27 | Mixed DP drill (8 probs) | — | — (Mock) |
| 28 | **Mock (6 DP)** | — | Editorial deep-dive |

## 🗓 Week 5 (29–35): LeetCode Medium Marathon

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 29 | Recap medium patterns (IB) | 3× LC Medium (array) | CF Div 2 |
| 30 | Trees & Graphs medians (IB) | 3× LC Medium (trees) | CodeChef Long Challenge (ongoing) |
| 31 | Backtracking & subsets (IB) | 3× LC Medium backtrack | CF Div 2 |
| 32 | Greedy & Heaps (IB) | 3× LC Medium greedy | LeetCode Weekly |
| 33 | Two-Pointers advanced | 3× LC Medium 2-ptr | CF Div 2 |
| 34 | Mixed medium set (9 probs) | — | CodeChef Starters |
| 35 | **Mock (5 medium + 1 easy)** | — | Editorial + pattern summary |

## 🗓 Week 6 (36–42): Mock Interviews & Contests

| Day | Morning | Midday | Evening (Contest / Mock) |
| --- | --- | --- | --- |
| 36 | InterviewBit interview track | 2× mock interview questions | CF Div 3 |
| 37 | HR rounds & resume review | 2× LC Medium | CodeChef Lunchtime |
| 38 | Behavioral prep | 2× mock system design Qs | LeetCode Bi-weekly |
| 39 | Complexity & trade-offs | 2× LC Medium | CF Div 2 |
| 40 | Live debugging | 2× LC Medium | CodeChef Long Challenge |
| 41 | Mixed mock: DS/DP/graph | — | — (Full mock interview) |
| 42 | **Mock (4 probs + 1 design)** | — | Editorial + feedback log |

## 🗓 Week 7 (43–49): Final Marathon & All-Contest Blitz

| Day | Morning | Midday | Evening (Contest) |
| --- | --- | --- | --- |
| 43 | Review weakest topics | CF Div 1 warm-up (past) | CF Div 3 |
| 44 | Mixed rapid drills | 6× LC Medium sprint | LeetCode Weekly |
| 45 | Team-style mock (solo roles) | 5× mixed past regionals | CodeChef Starters |
| 46 | Stress test: 4× CF Div 1 rats | — | CF Div 2 |
| 47 | System design flashcards | 3× LC Medium | CodeChef Lunchtime |
| 48 | Full 3-prob, 3-hr CF sim | — | CF Div 2 |
| 49 | Mixed track (DS/DP/graph) | — | LeetCode Bi-weekly |

## ✅ Day 50: Wrap-Up & Next Steps

* **Identify** 2 weakest areas & schedule daily 30 min drills
* **Plan** company-specific LeetCode lists + campus mocks
* **Celebrate** your CF-steady, LC-medium prowess! 🎉

### 🔑 Heuristics & Pitfalls

1. **Contest Key:** Never miss your “home” contest: CF Div 3 on Sundays, LeetCode Weekly on Saturdays, CodeChef Lunchtime mid-month, Starters first weekend, Long Challenge spanning 10 days.
2. **Time-box:** 15–20 min per contest problem, then mark for review.
3. **Rotate:** Jump between platforms to expose yourself to different test-case styles.
4. **Graph Drills:** Code each graph pattern (BFS, DFS, Dijkstra, topo) twice—recursive & iterative.
5. **Mock Interviews:** Record & critique your live thinking to eliminate “uhms” in real interviews.

Stick to this schedule, and you’ll keep your **Codeforces ~1200**, regularly conquer **LeetCode mediums**, and rock every **CodeChef** and **LeetCode** contest you enter—while being fully interview-ready for top companies. Good luck!