**✅ 1. Core Topics You MUST Cover**

These will cover **90% of 2⭐-level problems**:

1. **Math Basics**
   * GCD, LCM (Euclidean Algorithm)
   * Modular arithmetic (a % m, (a+b)%m, (a\*b)%m)
   * Fast Power (binary exponentiation for big exponents)
2. **Arrays & Prefix Sum**
   * Range sum queries (prefix[i])
   * Subarray sum problems
   * Difference array (for range updates)
3. **Two Pointers / Sliding Window**
   * Find subarray with sum ≤ K
   * Count pairs with condition (like abs(i-j) <= k)
4. **Greedy**
   * Sorting + picking min/max
   * Interval scheduling style problems (choose earliest finishing time)
   * Coin change type logic (always pick largest possible first if optimal)
5. **Binary Search**
   * Searching in sorted array
   * Binary Search on Answer (min/max days, capacity problems)
6. **Hashing / Frequency**
   * Counting freq of elements using map/unordered\_map
   * Detect duplicates
   * Majority element (Moore’s Voting)

**✅ 2. Contest Strategy**

* **First 2 Problems** → Secure them (they’re usually direct math/arrays).
* Always test on:
  + n=1
  + all values same
  + very large input
* Skip if stuck >15 mins → move on.

**✅ 3. Practice Routine**

* Solve **30–40 problems** (difficulty 0–1400) → mix from:
  + CodeChef Beginner + Easy
  + Codeforces A + easy B
  + LeetCode Easy (prefix sum, two pointers)

**✅ 4. Timeline (Fast Track to 2⭐)**

* **Week 1–2** → Learn & practice prefix sum, greedy, two pointers.
* **Week 2–3** → Add binary search + hashing.
* **Every Contest** → Target 2 problems solved.

Within **2–3 contests**, if you’re consistent, your rating will cross **1400 = 2⭐** 🎯

⚡ Shortcut rule:  
If you can **confidently solve:**

* Prefix sum problem
* Greedy sorting problem
* Simple two-pointers problem

👉 You’re already contest-ready for **2⭐**.