300 problems from my sheet:

Week 1 – Must-Know + Good-to-Know

Day	Problems
Day 1	474, 494, 518, 1155, 368, 1278, 312, 887, 2140, 1770, 354, 1406, 1526, 1578, 1579, 1631, 1658, 1760, 1888, 1626
Day 2	863, 802, 1192, 417, 909, 2370, 2435, 1930, 2007, 2013, 2104, 2306, 1334, 373, 502, 857, 630, 1834, 1705, 1985, 992, 567
Day 3	904, 930, 256, 2398, 2405, 2483, 1383, 452, 1029, 763, 2050, 1964 , 875, 1482, 1011, 1231, 1675, 1291
Day 4	1381, 1129, 236, 662, 1730, 1382, 3355, 3356, 1343, 1376, 198, 1248, 1293, 2017, 2101, 2251, 2316, 2345, 2369
Day 5	2477, 2492, 2534, 2577, 2661, 2962, 3108, 1373, 986, 983, 1110, 1052, 2458, 1235, 249, 1650, 339, 56
Day 6	1366, 994, 767, 79, 286, 277, 694, 1381, 567, 91, 131, 438, 1166, 681, 95, 229, 130, 1334, 787, 1482, 547, 576
Day 7	556, 2933, 937, 785, 853, 1358, 47, 979, 271, 1248, 1219, 329, 1168, 981, 1049, 2101, 1584, 198, 740.

Quad trees, sparse tables, full working code for lld

Week 2 – Good-to-Know + Optional

Day	Problems
Day 8	256, 2369, 1035, 2140, 2466, 1626, 935, 1921, 649, 1423, 1029, 646, 1647, 2125, 1155, 978, 452, 1041, 528, 539
Day 9	359, 1937, 1293, 2416, 2115, 2018, 419, 2096, 2661, 5, 138, 17, 11, 651, 639, 1230, 2812, 97, 1871, 474, 2050, 1105
Day 10	1964, 51, 32, 86, 42, 353, 332, 540, 354, 269, 297, 2147, 552, 1898, 2768, 337, 909, 1462, 473, 980, 716, 3108
Day 11	920, 1866, 2742, 879, 10, 314, 632, 127, 76, 588, 862, 1438, 1216, 37, 715, 126, 2296, 123, 2402, 887, 975, 1192
Day 12	706, 1382, 847, 1124, 940, 3394, 332, 1278, 837, 382, 691, 1675, 554, 863, 1730, 2370, 2435, 962, 4, 41, 84, 85, 134
Day 13	146, 155, 174, 189, 221, 222, 224, 230, 235, 269, 285, 307, 310, 315, 315, 365, 366, 380, 406, 410, 413, 418
Day 14	424, 450, 472, 493, 554, 581, 522, 523, 611, 621, 662, 720, 721, 729, 778, 778, 799, 802, 827, 857, 871, 895

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mischellneous problem:

Segment Tree + Lazy : 307, 729, 731, 732, 715, 218, 1649, 1409, 308, 2407

Fenwick Tree / BIT : 307, 1649, 315, 327, 493, 1521, 1395, 2426, 251, 53

Randomized / Reservoir Sampling : 382, 398, 528, 497, 710, 519, 1206, 381, 384, 172

Trie + Bitwise Trie : 421, 1707, 1803, 648, 208, 212, 336, 1268, 676, 472

Backtracking (Hard + Pruning) : 212, 425, 301, 37, 51, 52, 473, 698, 1307, 842

✅ **Guidelines:**

- **Hard (Tier 1)**: Solve fully with DP, BFS/DFS, Graph patterns, trees.
- **Medium (Tier 2)**: Focus on key tricks and variations, no full coding if already familiar.
- **Optional (Tier 3)**: Attempt if time permits, mainly **pattern recognition**.
- **Daily load**: ~21–22 proble

patterns:

flip perspective:

887, 416, 494, 1049, 518, 877, 486, 1406, 1140, 410, 1011, 774, 45, 55

russian doll based pattern:

1. **354** – Russian Doll Envelopes
2. **1691** – Maximum Height by Stacking Cuboids
3. **300** – Longest Increasing Subsequence
4. **646** – Maximum Length of Pair Chain
5. **406** – Queue Reconstruction by Height
6. **1713** – Minimum Operations to Make a Subsequence
7. **1712** – Ways to Split Array Into Good Subarrays
8. **674** – Maximum Sum Increasing Subsequence
9. **35** – Search Insert Position (1D variant of sorting + placement)
10. **1027** – Longest Arithmetic Sequence

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visualisation based, like 1526:

42, 84, 85, 122, 1288, 1326, 1526, 2017, 238, 239, 240, 316, 407, 560, 1759

binary search on space, just like 1760:
1760,875,410,1011,774,668,1552,719,2226,1744,1231,1201

palindrom and LIS based: 300, 673, 354, 368, 646, 1626, 1671, 1964, 5, 516, 131, 132, 647, 214, 409, 125, 680, 1745

merge k sorted list type leetcode 373 variants:
23, 373, 378, 632, 786, 719, 1439, 2040, 264, 313

leetcode 857 variants:

857, 1383, 1642, 135, 321, 871, 410

leetcode 930 variants:
904, 992, 1248, 930, 1004, 713, 1234, 424, 340, 159

leetcode 2398:
239, 862, 1425, 1438, 1004, 1499, 1696, 2398, 2104, 567, 76

Lazy propogation: leetcode 1381 :
1381, 370, 1109, 1094, 253, 732, 995, 307, 850, 699, 239, 1209, 935

Difference array:
370, 1109, 1094, 1854, 253, 1943, 2270, 2848, 2381, 1589, 303, 307, 327, 528, 2569, 2528, 3355

Moore voting algo, similar to 277
169, 229, 287, 875, 1283, 162, 540, 153, 33, 278, 374, 1011, 410, 154, 1095, 1901

feels like dp but actually greedy, similar to leetcode 646
435, 452, 1024

similar to leetcode 1647:
1647, 1838, 1487, 1353, 781, 1503

Advance patterns:

1. Bitmask DP

Bitmask DP: **1879, 1066, 698, 526, 473**

🟩 2. State-Machine DP (Finite State DP)

State-Machine DP: **1220, 1411, 10, 940, 115**

🟨 3. Digit DP

Digit DP: **902, 788, 1397, 600, 1012**

🟧 4. Interval DP

Interval DP: **312, 516, 1312, 1547, 1000**

🟥 5. Tree DP

Tree DP: **834, 1372, 1617, 1245, 968**

🟪 6. Rerooting DP

Rerooting DP: **834** (again), **310**, **2603**, **2049**, **1719**

🟫 7. Meet-in-the-Middle

Meet-in-the-Middle: **1755, 805, 2025, 1981, 112**

⬛ 8. Monotonic Queue / Deque

Monotonic Queue: **239, 862, 1438, 1499, 1701**

⬜ 9. Convex Hull Trick / DP Optimization

CHT / DP Optimization: **410, 1478, 1547 (alt), 1235, 1531**

(Convex Hull proper is extremely rare on LC; these are DP-optimizable by CHT.)

🟫 10. Expected Value / Probability DP

Probability DP: **808, 837, 688, 1262, 1227**

🟧 11. Hard Graph State DP (BFS + mask / Multiple states)

Graph + Bitmask: **847, 864, 1293, 1434, 1368**

🟨 12. Advanced String Algorithms (KMP / Z / Automaton)

Automaton/String DP: **1392, 1044, 10, 44, 727**

🟩 13. DP After Sorting / Transformation DP ("Tweaked DP")

Tweaked DP: **740**, **1626**, **354**, **873**, **1048**

🟦 14. DP on Bitwise States (XOR, AND, OR constraints)

Bitwise State DP: **1444, 1178, 137, 2607, 1911**

🟪 15. Subsequence DP / Automaton-Enhanced

Subsequence Automaton: **727, 1425, 940, 1092, 2484**