

Implementation / Constructive: (10*5=50)

1. <https://codeforces.com/problemset/problem/282/A>
2. <https://codeforces.com/contest/514/problem/A>
3. <https://codeforces.com/problemset/problem/263/A>
4. <https://codeforces.com/problemset/problem/151/A>
5. <https://codeforces.com/problemset/problem/723/A>
6. <https://codeforces.com/problemset/problem/1352/A>
7. <https://codeforces.com/problemset/problem/510/A>
8. <https://codeforces.com/problemset/problem/785/A>
9. <https://codeforces.com/problemset/problem/144/A>
10. <https://codeforces.com/problemset/problem/1030/A>
11. <https://codeforces.com/problemset/problem/136/A>
12. <https://codeforces.com/problemset/problem/110/A>
13. <https://codeforces.com/problemset/problem/116/A>
14. <https://codeforces.com/problemset/problem/977/A>
15. <https://codeforces.com/problemset/problem/546/A>
16. <https://codeforces.com/problemset/problem/791/A>
17. <https://codeforces.com/problemset/problem/236/A>
18. <https://codeforces.com/problemset/problem/281/A>
19. <https://codeforces.com/problemset/problem/339/A>
20. <https://codeforces.com/problemset/problem/1368/A>
21. <https://codeforces.com/problemset/problem/702/A>
22. <https://codeforces.com/problemset/problem/1097/A>
23. <https://codeforces.com/problemset/problem/492/A>
24. <https://codeforces.com/problemset/problem/1433/A>
25. <https://codeforces.com/problemset/problem/1303/A>
26. <https://codeforces.com/problemset/problem/1095/A>
27. <https://codeforces.com/problemset/problem/1391/B>
28. <https://codeforces.com/problemset/problem/118/A>
29. <https://codeforces.com/problemset/problem/1300/B>
30. <https://codeforces.com/problemset/problem/1430/C>
31. <https://codeforces.com/contest/139/problem/A>
32. <https://codeforces.com/problemset/problem/219/A>
33. <https://codeforces.com/problemset/problem/1141/A>
34. <https://codeforces.com/problemset/problem/118/B>
35. <https://codeforces.com/problemset/problem/1373/A>
36. <https://codeforces.com/problemset/problem/268/B>
37. <https://codeforces.com/problemset/problem/476/A>
38. <https://codeforces.com/problemset/problem/500/A>
39. <https://codeforces.com/problemset/problem/131/A>
40. <https://codeforces.com/problemset/problem/1139/B>
41. <https://codeforces.com/problemset/problem/1199/A>
42. <https://codeforces.com/problemset/problem/1073/A>
43. <https://codeforces.com/problemset/problem/109/A>
44. <https://codeforces.com/problemset/problem/1244/B>

45. <https://codeforces.com/problemset/problem/1027/A>
46. <https://codeforces.com/problemset/problem/1278/A>
47. <https://codeforces.com/problemset/problem/1133/A>
48. <https://codeforces.com/problemset/problem/507/A>
49. <https://codeforces.com/problemset/problem/1237/A>
50. <https://codeforces.com/problemset/problem/486/B>

Maths: (10*5=50)

1. <https://codeforces.com/problemset/problem/1337/A>
2. <https://codeforces.com/problemset/problem/1389/A>
3. <https://codeforces.com/problemset/problem/959/A>
4. <https://codeforces.com/problemset/problem/1426/A>
5. <https://codeforces.com/problemset/problem/1296/A>
6. <https://codeforces.com/problemset/problem/1385/A>
7. <https://codeforces.com/problemset/problem/1358/A>
8. <https://codeforces.com/problemset/problem/1294/A>
9. <https://codeforces.com/problemset/problem/1353/A>
10. <https://codeforces.com/problemset/problem/1371/A>
11. <https://codeforces.com/problemset/problem/1360/A>
12. <https://codeforces.com/problemset/problem/1367/B>
13. <https://codeforces.com/problemset/problem/1374/A>
14. <https://codeforces.com/problemset/problem/1343/B>
15. <https://codeforces.com/problemset/problem/732/A>
16. <https://codeforces.com/problemset/problem/1154/A>
17. <https://codeforces.com/problemset/problem/1409/A>
18. <https://codeforces.com/problemset/problem/1335/A>
19. <https://codeforces.com/problemset/problem/1328/A>
20. <https://codeforces.com/problemset/problem/617/A>
21. <https://codeforces.com/problemset/problem/50/A>
22. <https://codeforces.com/problemset/problem/1117/B>
23. <https://codeforces.com/problemset/problem/1195/A>
24. <https://codeforces.com/problemset/problem/1181/A>
25. <https://codeforces.com/problemset/problem/1266/B>
26. <https://codeforces.com/problemset/problem/1107/B>
27. <https://codeforces.com/problemset/problem/1260/A>
28. <https://codeforces.com/problemset/problem/1266/A>
29. <https://codeforces.com/problemset/problem/1620/B>
30. <https://codeforces.com/problemset/problem/610/A>
31. <https://codeforces.com/problemset/problem/69/A>
32. <https://codeforces.com/problemset/problem/1/A>
33. <https://codeforces.com/problemset/problem/1199/B>
34. <https://codeforces.com/problemset/problem/1257/B>
35. <https://codeforces.com/problemset/problem/1204/A>
36. <https://codeforces.com/problemset/problem/515/A>

37. <https://codeforces.com/problemset/problem/1395/A>
38. <https://codeforces.com/problemset/problem/688/B>
39. <https://codeforces.com/problemset/problem/1473/B>
40. <https://codeforces.com/problemset/problem/1476/A>
41. <https://codeforces.com/problemset/problem/1359/A>
42. <https://codeforces.com/problemset/problem/1342/A>
43. <https://codeforces.com/problemset/problem/1463/A>
44. <https://codeforces.com/problemset/problem/463/B>
45. <https://codeforces.com/problemset/problem/1511/B>
46. <https://codeforces.com/problemset/problem/630/C>
47. <https://codeforces.com/problemset/problem/1189/B>
48. <https://codeforces.com/problemset/problem/1038/B>
49. <https://codeforces.com/problemset/problem/630/D>
50. <https://codeforces.com/problemset/problem/1355/A>

Binary Search:

Easy:

1. <https://codeforces.com/contest/371/problem/C>
2. <https://codeforces.com/contest/670/problem/D1>
3. <https://codeforces.com/contest/287/problem/B>
4. <https://codeforces.com/problemset/problem/1613/C>

Med:

1. <https://codeforces.com/contest/689 /problem/C>
2. <https://codeforces.com/contest/1169/problem/C>
3. <https://codeforces.com/contest/1073/problem/C>
4. <https://codeforces.com/contest/448/problem/D>

Hard:

1. <https://codeforces.com/contest/1132/problem/D>
2. <https://codeforces.com/contest/954/problem/E>
3. <https://codeforces.com/contest/1288/problem/D>
4. <https://codeforces.com/contest/1370/problem/D>

Prime, Sieve, Prime Factorisation:

Easy:

1. <https://www.spoj.com/problems/PRIME1/cstart=10>

2. <https://www.spoj.com/problems/TDPRIMES/>
3. <https://www.spoj.com/problems/TDKPRIME/>

Med:

1. <https://codeforces.com/contest/264/problem/B>
2. <https://codeforces.com/contest/735/problem/D>
3. <https://codeforces.com/contest/546/problem/D>
4. <https://codeforces.com/contest/222/problem/C>

Hard:

1. <https://codeforces.com/problemset/problem/111/B>
2. <https://codeforces.com/contest/1228/problem/C>
3. <https://codeforces.com/contest/1101/problem/D> (graph + sieve)

Bit Manipulation/Power Set:

Easy:

1. <https://codeforces.com/problemset/problem/912/B>
2. <https://codeforces.com/problemset/problem/1594/B>
3. <https://codeforces.com/problemset/problem/1097/B>
4. <https://codeforces.com/contest/1602/problem/C>

Med:

1. <https://codeforces.com/problemset/problem/1095/C>
2. <https://codeforces.com/problemset/problem/1494/B>
3. <https://codeforces.com/problemset/problem/1151/B>
4. <https://codeforces.com/problemset/problem/1225/C>

Hard:

1. <https://codeforces.com/contest/1174/problem/D>
2. <https://codeforces.com/problemset/problem/1391/D>
3. <https://codeforces.com/problemset/problem/1491/D>

Stack/Queues/PriorityQueues:

Easy:

1. <https://codeforces.com/contest/343/problem/B>

2. <https://codeforces.com/contest/158/problem/C>
3. <https://codeforces.com/contest/5/problem/C>

Med:

1. <https://codeforces.com/contest/359/problem/D>
2. <https://codeforces.com/contest/1092/problem/D1>
3. <https://codeforces.com/contest/1313/problem/C2>
4. <https://codeforces.com/contest/1515/problem/C> (priority queue)

Hard:

1. <https://codeforces.com/contest/319/problem/B>
2. <https://codeforces.com/contest/487/problem/B>
3. <https://codeforces.com/contest/1092/problem/D2>
4. <https://codeforces.com/contest/1156/problem/E>
5. <https://codeforces.com/contest/911/problem/E>
6. <https://codeforces.com/contest/507/problem/E?locale=en> (priority queue)

String Algorithms:

String hashing:

1. <https://codeforces.com/problemset/problem/271/D>
2. <https://codeforces.com/contest/1326/problem/D2>
3. <https://codeforces.com/contest/514/problem/C>
4. <https://codeforces.com/contest/7/problem/D>
5. <https://codeforces.com/contest/514/problem/C>
6. <https://codeforces.com/contest/633/problem/C>

Kmp / Z-function

1. <https://codeforces.com/contest/1016/problem/B>
2. <https://codeforces.com/contest/471/problem/D>
3. <https://codeforces.com/problemset/problem/126/B>
4. <https://codeforces.com/contest/346/problem/B>
5. <https://codeforces.com/contest/1138/problem/D>
6. <https://codeforces.com/contest/126/problem/B>
7. <https://codeforces.com/contest/432/problem/D>
8. <https://codeforces.com/contest/1537/problem/E2>

Manacher

1. <https://www.spoj.com/problems/NUMOFPAL/>
2. <https://www.spoj.com/problems/LPS/>

3. <https://www.spoj.com/problems/MSUBSTR/>
4. <https://www.spoj.com/problems/EPALIN/>
5. <https://codeforces.com/contest/1080/problem/E>

BFS

1. <https://codeforces.com/problemset/problem/1006/F>

Tree's:

Easy:

1. <https://cses.fi/problemset/task/1674>
2. <https://cses.fi/problemset/task/1130>
3. <https://codeforces.com/gym/102694/problem/A> (depth)
4. <https://codeforces.com/gym/102694/problem/B> (diameter)

Med – Hard:

1. <https://codeforces.com/contest/1006/problem/E> (just tin tout concept)
2. <https://cses.fi/problemset/task/1133>
3. <https://codeforces.com/contest/1294/problem/F>

LCA

Easy:

1. <https://codeforces.com/gym/102694/problem/C>
2. <https://codeforces.com/gym/102694/problem/D>

Medium:

1. <https://codeforces.com/contest/1328/problem/E>
2. <https://codeforces.com/contest/1304/problem/E>
3. <https://codeforces.com/contest/208/problem/E>
4. <https://codeforces.com/contest/191/problem/C>

Hard:

1. <https://codeforces.com/contest/519/problem/E>
2. <https://codeforces.com/contest/587/problem/C>

3. <https://codeforces.com/contest/609/problem/E>
4. <https://codeforces.com/contest/466/problem/E>

Euler Tour:

1. <https://codeforces.com/gym/102694/problem/E>
2. <https://codeforces.com/gym/102694/problem/F>

Graph Algorithms

(DFS, BFS, Dijkstra, Floyd Washall, Bellman Ford, Bridges, 0-1 BFS, Bipartite, Topo-sort ...):

Easy:

1. <https://codeforces.com/problemset/problem/520/B>
2. <https://codeforces.com/problemset/problem/115/A>
3. <https://codeforces.com/problemset/problem/580/C>
4. <https://codeforces.com/problemset/problem/977/E>
5. <https://codeforces.com/contest/1144/problem/F> (simple dfs)
6. <https://codeforces.com/contest/510/problem/C> (topo sort)
7. <https://codeforces.com/contest/20/problem/C> (dijkstra)
8. <https://codeforces.com/problemset/problem/475/B> (SCC)

Med:

1. <https://codeforces.com/contest/986/problem/A> (djstra)
2. <https://codeforces.com/contest/242/problem/C> (bfs)
3. <https://codeforces.com/contest/1345/problem/D> (flood fill)
4. <https://codeforces.com/contest/229/problem/B> (dijkstra)
5. <https://codeforces.com/contest/1385/problem/E> (topo sort)
6. <https://codeforces.com/contest/295/problem/B> (floyd warshal)
7. <https://codeforces.com/contest/1213/problem/F> (SCC)
8. <https://codeforces.com/contest/1343/problem/E> (djstra)
9. <https://codeforces.com/contest/1296/problem/E1> (biparthite)

Hard:

1. <https://codeforces.com/contest/1573/problem/C> (topo sort)
2. <https://codeforces.com/contest/1547/problem/G>
3. <https://codeforces.com/contest/229/problem/B> (djstra)
4. <https://codeforces.com/contest/400/problem/D> (flyod warshal)
5. <https://codeforces.com/contest/178/problem/B3> (bridges)

Matrix Exponentiation: (basic to hard sorted)

1. <https://codeforces.com/problemset/problem/185/A>
2. <https://codeforces.com/contest/1117/problem/D>
3. <https://codeforces.com/contest/582/problem/B>
4. <https://codeforces.com/contest/222/problem/E>
5. <https://codeforces.com/contest/621/problem/E>
6. <https://codeforces.com/contest/1182/problem/E>

Trie:

1. <https://codeforces.com/contest/706/problem/D>
2. <https://codeforces.com/contest/948/problem/D>
3. <https://codeforces.com/contest/665/problem/E>
4. <https://codeforces.com/contest/1285/problem/D>
5. <https://codeforces.com/contest/858/problem/D>
6. <https://codeforces.com/contest/455/problem/B>
7. <https://codeforces.com/contest/113/problem/B>
8. <https://codeforces.com/contest/282/problem/E>

Dynamic Programming:

Easy:

1. <https://codeforces.com/problemset/problem/702/A>
2. <https://codeforces.com/problemset/problem/894/A>
3. <https://codeforces.com/problemset/problem/1501/B>
4. <https://codeforces.com/problemset/problem/1469/B>
5. <https://codeforces.com/problemset/problem/363/B>
6. <https://codeforces.com/problemset/problem/313/B>
7. <https://codeforces.com/problemset/problem/327/A>
8. <https://codeforces.com/problemset/problem/961/B>
9. <https://codeforces.com/problemset/problem/522/A>
10. <https://codeforces.com/problemset/problem/1042/B>
11. <https://codeforces.com/problemset/problem/189/A>
12. <https://codeforces.com/problemset/problem/1420/C1>
13. <https://codeforces.com/problemset/problem/414/B>
14. <https://codeforces.com/problemset/problem/1195/C>
15. <https://codeforces.com/problemset/problem/1350/B>

Med:

1. <https://codeforces.com/contest/505/problem/C>

2. <https://codeforces.com/contest/577/problem/B>
3. <https://codeforces.com/contest/204/problem/A>
4. <https://codeforces.com/contest/448/problem/C>
5. <https://codeforces.com/contest/479/problem/E>
6. <https://codeforces.com/contest/401/problem/D>
7. <https://codeforces.com/contest/777/problem/E>
8. <https://codeforces.com/contest/1036/problem/C>
9. <https://codeforces.com/contest/219/problem/D>
10. <https://codeforces.com/contest/337/problem/D>

Hard:

1. <https://codeforces.com/contest/165/problem/E>
2. <https://codeforces.com/contest/687/problem/C>
3. <https://codeforces.com/contest/1132/problem/F>
4. <https://codeforces.com/contest/1253/problem/E>
5. <https://codeforces.com/contest/1216/problem/F>
6. <https://codeforces.com/contest/461/problem/B>
7. <https://codeforces.com/contest/319/problem/C>
8. <https://codeforces.com/contest/1083/problem/E>
9. <https://codeforces.com/contest/507/problem/D>
10. <https://codeforces.com/contest/540/problem/D>

Disjoint Set:

Easy:

1. <https://codeforces.com/problemset/problem/1534/C>
2. <https://codeforces.com/problemset/problem/217/A>
3. <https://codeforces.com/contest/277/problem/A>

Med:

1. <https://codeforces.com/contest/884/problem/C>
2. <https://codeforces.com/contest/1332/problem/C>
3. <https://codeforces.com/contest/455/problem/C>

Hard:

1. <https://codeforces.com/contest/1156/problem/D>
2. <https://codeforces.com/contest/1213/problem/G>
3. <https://codeforces.com/problemset/problem/1494/D>
4. <https://codeforces.com/problemset/problem/455/C>

Sqrt Decomposition/ MO's algo:

1. <https://codeforces.com/contest/86/problem/D>
2. <https://codeforces.com/contest/617/problem/E>
3. <https://codeforces.com/contest/220/problem/B>
4. <https://codeforces.com/contest/1514/problem/D>
5. <https://codeforces.com/contest/375/problem/D>
6. <https://codeforces.com/contest/242/problem/E>

Fenwick Tree:

1. <https://codeforces.com/contest/61/problem/E>
2. <https://codeforces.com/contest/1311/problem/F>
3. <https://codeforces.com/contest/283/problem/A>
4. <https://codeforces.com/contest/459/problem/D>
5. <https://codeforces.com/contest/340/problem/D>
6. <https://codeforces.com/contest/1076/problem/E>
7. <https://codeforces.com/contest/1354/problem/D>
8. <https://codeforces.com/contest/1405/problem/E>
9. <https://codeforces.com/contest/383/problem/C>
10. <https://codeforces.com/contest/1526/problem/D>
11. <https://codeforces.com/contest/276/problem/E>
12. <https://codeforces.com/contest/375/problem/D>

Segment Tree(lazy also included):

1. <https://codeforces.com/contest/339/problem/D>
2. <https://codeforces.com/contest/914/problem/D>
3. <https://codeforces.com/contest/459/problem/D>
4. <https://codeforces.com/contest/61/problem/E>
5. <https://codeforces.com/contest/380/problem/C>
6. <https://codeforces.com/contest/474/problem/F>
7. <https://codeforces.com/contest/1237/problem/D>
8. <https://codeforces.com/contest/292/problem/E>
9. <https://codeforces.com/contest/482/problem/B>
10. <https://codeforces.com/contest/1187/problem/D>
11. <https://codeforces.com/contest/920/problem/F>
12. <https://codeforces.com/contest/1535/problem/D?locale=en>
13. <https://codeforces.com/contest/438/problem/D?locale=en>
14. <https://codeforces.com/contest/1556/problem/E>
15. <https://codeforces.com/contest/1567/problem/E>

Lazy propagation:

1. <https://codeforces.com/contest/52/problem/C>
2. <https://codeforces.com/contest/1023/problem/D>
3. <https://codeforces.com/contest/242/problem/E>
4. <https://codeforces.com/contest/1557/problem/D>
5. <https://codeforces.com/contest/145/problem/E>
6. <https://codeforces.com/contest/777/problem/E>