```
http://www.spoj.com/problems/ADAZOO/
http://www.spoj.com/problems/ADASEQEN/
http://www.spoj.com/problems/ADAMOLD/
11552 UVA (3)
12172 UVA (3)
4507 LA (5)
4510 LA (5) [+ geometry]
12181 UVA (6)
http://codeforces.com/contest/729/problem/F 6
http://codeforces.com/contest/735/problem/E 9
http://codeforces.com/contest/731/problem/E 5
12030 UVA (4)
http://codeforces.com/contest/721/problem/E 7
http://codeforces.com/contest/742/problem/D 4
12040 UVA (5)
http://codeforces.com/contest/712/problem/D 5
13162 UVA (6)
http://codeforces.com/contest/743/problem/E 6
11908 UVA (3)
11932 UVA (4)
```

```
http://codeforces.com/contest/745/problem/E (7)
11806 UVA (4)
http://codeforces.com/contest/747/problem/F (5)
11843 UVA (4)
http://codeforces.com/contest/752/problem/E (5)
http://codeforces.com/contest/703/problem/E (7)
11753 UVA (4)
11725 UVA (5)
http://codeforces.com/contest/722/problem/E (9)
http://codeforces.com/contest/760/problem/F (8)
11795 UVA (3)
11654 UVA (4)
11523 UVA (5)
11404 UVA (4)
11432 UVA (4)
11451 UVA (4) //C==20 mistake in statement
11301 UVA (4)
http://codeforces.com/contest/762/problem/D 5
11361 UVA (4) //digit DP
```

```
11365 UVA (7)
11391 UVA (4) //easy implementation
11394 UVA (3)
11218 UVA (2)
11125 UVA (4) //slightly implementation
11076 UVA (3)
11081 UVA (4) //3 string sub sequences (beware of fail)
http://codeforces.com/contest/678/problem/E (5) //bit set dp + probability
http://codeforces.com/contest/766/problem/C (4)
http://codeforces.com/contest/667/problem/C (3)
http://www.spoj.com/problems/MOVIFAN/ (3)
http://www.spoj.com/problems/ORDSUM23/ (3)
http://www.spoj.com/problems/DIVSEQ/ (4) //N^3 (but better...) works fine
http://codeforces.com/contest/633/problem/F (7) //Tree dp
http://www.spoj.com/problems/ADJDUCKS/ (4) sort + pick 2-3 continuous
O(N)
http://www.spoj.com/problems/JLNT/ (4) //pick O or 2 | 1e3*5e3
http://www.spoj.com/problems/TPCPALIN/ (5) //500^3 works (3rd countable)
http://www.spoj.com/problems/COLORSEG/ (4) //50^4==OK 50^4log(N)=TLE
NICE
http://www.spoj.com/problems/POWERCAR/ (3) //1e3*1e3*2 - follow rules
http://www.spoj.com/problems/INGRED/ (5) //TSP-like [reduce + go]
http://www.spoj.com/problems/BADXOR/ (4) //classical subsets
http://www.spoj.com/problems/SPCO/ (5) //64*64*2 DP {OPT: prime O(1) +
clear only half?
http://www.spoj.com/problems/WAYHOME/ (5) //NICE: 1) 1*1 b)12,1,**,2
```

```
http://www.spoj.com/problems/NFURY/ (2) //Minimal sum of squares
http://www.spoj.com/problems/GDIL/ (3) //combinatorics
http://codeforces.com/contest/791/problem/D (5) //Tree
http://codeforces.com/contest/791/problem/E (6) //V,K,X - pick any
http://codeforces.com/contest/789/problem/C (3)
13176 (4) //N^6
13179 (5) //NICE [Ath][Bth][TimeDiff]
http://codeforces.com/contest/796/problem/E (6) //NICE: N*P*K*K (WC can't
happen!)
http://codeforces.com/contest/797/problem/E (4) //NICE: Almost BF-able (but
care of low K)
http://codeforces.com/contest/793/problem/D (3) //NICE & EASY:
begin/end/actual/USED
http://codeforces.com/contest/803/problem/E (4) //State search — many IF's
(EASY)
http://codeforces.com/contest/805/problem/F (7) //NICE: DP on tree + fast BF
+ hack
http://codeforces.com/contest/808/problem/E (5) //NICE!
http://codeforces.com/contest/811/problem/C (4) //Precalculate + DP (greedy
thinking)
10817 UVA 4 //Easy but slightly implementation
10859 UVA 4 //Nice — on tree .. but for a reason small constrains
```

```
10898 UVA 4 //Hash is lesser than 1e6 .. try everything
```

http://codeforces.com/contest/812/problem/B (3) //Not only DP, yet imho easiest ..many spec cases

http://codeforces.com/contest/813/problem/D (5) //VERY VERY NICE - N*N (none picked between a/b)

http://codeforces.com/contest/814/problem/E 5 //VERY NICE — Harder imple: Combinatorics

http://codeforces.com/problemset/problem/816/E (6) //NICE — Tree (hard 2C complexity)

http://codeforces.com/contest/837/problem/D (5) //NICE — yet kinda pain [must be iterative]

<u>http://www.spoj.com/problems/AUT/</u> (4) //NICE — K is interesting \sim at most 1600

<u>http://www.spoj.com/problems/GNYRO4C/</u> (3) //Easy — Nice idea [Big→ Low approach]

http://www.spoj.com/problems/TIEROPE/ (4) //Process 2*L ~ otherwise pick BIG

http://www.spoj.com/problems/IITKWPCE/ (4) //Palindromes [efficiency!] — NICE!

IITKWPCD SPOJ (4) //+Slightly geometry

http://www.spoj.com/problems/LKS/ (3) //Classical knapsack

http://www.spoj.com/problems/UOFTAE/ (3) //Easy & Sympatic DP

http://www.spoj.com/problems/DCOWS/ (4) //Very NICE (sort + GO)

http://www.spoj.com/problems/FARIDA/ (3) //Easy & Sympatic ((u+1) |

Price+(u+2))

http://www.spoj.com/problems/AU7_5/ (2) //EASY: dyn(n-1)+dyn(n-k-1) http://www.spoj.com/problems/NAIVELOK/ (4) //NICE [depalindromisation]

http://codeforces.com/contest/846/problem/C (4) //With print

```
http://www.spoj.com/problems/CNT_LUCK/ (4) //Number (binary) dp [NICE]
full care 0-17
http://www.spoj.com/problems/MAY99_4/ (3) //Almost combinatoric Sub and
0/1.1/0
http://www.spoj.com/problems/GEEKOUNT/ (4) //Number dp
http://www.spoj.com/problems/MUTDNA/ (4) // N*2 (turned?) [not sure if grd
poss.]
http://www.spoj.com/problems/RIOI_3_2/ (5) //VERY NICE (easy imple -
Number Theory thinking)
http://www.spoj.com/problems/MAXWOODS/ (3) //NICE [EASY][GRID]
http://www.spoj.com/problems/DIEHARD/ (3) //Easy — prolly solvable by
greedy (but dp is easier)
http://www.spoj.com/problems/DCEPC810/ (4) //VERY VERY NICE -
Subsequence 2pointers+2bools
http://www.spoj.com/problems/EQ2/ (4) //NICE: Digit + Carry (from back) -
iff-party
http://www.spoj.com/problems/DCEPC501/ (3) //NICE & EASY
http://www.spoj.com/problems/NUMTSN/ (4) //NICE — Thinking or Opti
http://www.spoj.com/problems/GONE/ (4) //NICE & EASY [digits]
http://www.spoj.com/problems/RAONE/ (4) //NICE & EASY [digits] — almost
similar as above
http://www.spoj.com/problems/STRSEQ/ (4) //VERY VERY NICE - Next-
http://www.spoj.com/problems/MYQ8/ (4) //VERY NICE — 3x3 tic-tac-toe
[implementation]
http://codeforces.com/contest/859/problem/C (3) //Easy+Sympathic
[PrefixSumOptional]
http://codeforces.com/contest/859/problem/D (4) //NICE [Probabilities]
http://www.spoj.com/problems/UNICA/ (4) //VERY NICE
[Possibilities][Print][Classical]
http://www.spoj.com/problems/KOPC12H/ (4) //NICE Digit-DP
http://www.spoj.com/problems/DRACULA/ (4) //NICE Digit-DP (Both sides) -
iterate by sum
```

```
http://www.spoj.com/problems/ABCPATH/ (3) //DP over dfs (maybe without
dp works too?)
http://www.spoj.com/problems/BEHAPPY/ (2) //Easy one — low constraints
http://www.spoj.com/problems/STRCOUNT/ (4) //No input (over bits)
http://codeforces.com/contest/855/problem/B (2) //prolly not even necessary
http://codeforces.com/contest/855/problem/C (4) //dp on tree
http://codeforces.com/contest/855/problem/E (5) //VERY NICE - Digits &
Bitmask & Query (learning!)
http://www.spoj.com/problems/PAINTWAL/ (6) //VERY NICE - Imho hard
(Opti could beat)
http://www.spoj.com/problems/ADFRUITS/ (3) //Very simple (substring ==
subsequence)
http://www.spoj.com/problems/MAIN113/ (2) //NICE but somehow too low
constraints
http://www.spoj.com/problems/MAIN112/ (4) //NICE — Bitmask
http://codeforces.com/contest/864/problem/E (5) //VERY NICE - Sort
http://www.spoj.com/problems/NOVICE63/ (4) //NICE -On digits (binary)
http://www.spoj.com/problems/TUG/ (3) //NICE + Observation {N>100 ==
YES?
http://www.spoj.com/problems/DOMINO1/ (4) //Used map to solve it
http://www.spoj.com/problems/NY10E/ (2) //Easy dp
http://www.spoj.com/problems/MAIN72/ (3) //Easy knapsack
http://www.spoj.com/problems/NOVICE43/ (2) //Unbelievably low constraints
http://codeforces.com/contest/598/problem/E (4) //N^5 strategy works fine
[VERY NICE]
http://www.spoj.com/problems/CHAIR/ (3) //Maybe combinatorics too?
http://www.spoj.com/problems/ACPC10D/ (3) //NICE - DAG traversal
```

http://codeforces.com/problemset/problem/16/E (5) //Bitmask [NICE]

http://www.spoj.com/problems/CPCRC1C/ (4) //Digits dp (return pair)

http://www.spoj.com/problems/BORW/ (3) //Inc+Dec sequence (small array)

```
http://codeforces.com/problemset/problem/18/E (5) //VERY NICE {no need for
second iteration?
http://codeforces.com/contest/2/problem/B (5) //NICE - 2/5 are in-fact
independent
http://codeforces.com/contest/4/problem/D (3) //Classical [FW works too] XY
> xy
http://codeforces.com/contest/6/problem/D (4) //NICE (N^4)
http://codeforces.com/contest/321/problem/E (7) //VERY NICE - D&C Trick
http://codeforces.com/contest/868/problem/F (8) //VERY VERY NICE D&C
Trick — With MO Principal
http://codeforces.com/contest/8/problem/C (5) //NICE — Masks [N*2^N]
http://codeforces.com/contest/868/problem/E (8) //VERY NICE — HARD —
on tree
http://codeforces.com/contest/10/problem/D (4) //LCIS [NICE]
http://codeforces.com/contest/13/problem/C (5) //NICE [sorting][only
elements from array]
http://codeforces.com/contest/17/problem/C (5) //[NICE][iterative-
sparse][+idea]
http://codeforces.com/contest/19/problem/B (4) //Knapsack (after good look)
http://codeforces.com/contest/30/problem/C (4) //Probabilities + (slight)GEO
http://codeforces.com/contest/31/problem/E (4) //[NICE]
http://codeforces.com/contest/41/problem/D (4) //With printing
```

```
dp-tree
```

http://www.spoj.com/problems/ADASALES/

13089 — Golden Coins (UVA)

http://codeforces.com/problemset/problem/855/C

http://codeforces.com/problemset/problem/718/D

https://www.codechef.com/problems/TWOCOINS

https://www.hackerrank.com/contests/101hack35/challenges/roadmaintenance/problem

7649 — Performance Review (LA)

http://codeforces.com/problemset/problem/741/D

http://codeforces.com/problemset/problem/592/D

https://www.codechef.com/problems/TOMJERGA

http://codeforces.com/problemset/problem/814/D

1220 — Party at Hali-Bula (UVA)

https://www.hackerrank.com/contests/june-world-codesprint/challenges/rtree-decoration/problem

12452 - Plants vs. Zombies HD SP (UVA)

http://codeforces.com/problemset/problem/735/E

https://www.codechef.com/problems/COLTREE

12466 — Ancestors (UVA)

6829 — Intrepid climber (LA)

https://www.hackerrank.com/contests/101hack35/challenges/jeanies-route

12257 - The Queue (UVA)

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http://codeforces.com/problemset/problem/805/F

http://codeforces.com/problemset/problem/763/D

1218 — Perfect Service

3346 — Perfect Domination on Trees (same as above -_-)

12093 — Protecting Zonk

10859 — Placing Lampposts

http://codeforces.com/problemset/problem/23/E //NICE [but requires big int]

http://codeforces.com/problemset/problem/14/D (5) //NICE [sorting-one][2DFS]

http://www.spoj.com/problems/TWOPATHS/ (6) //VERY NICE Same as above ~ bigger constraints
```

http://codeforces.com/contest/868/problem/E (8) //VERY NICE — HARD —

on tree