Google Session on Top Cities

Topics
- DP (mid)
- Backtracking
- Debugging
- Upsolve

- Graph Theory
- Combinatorics
- Combinatorial Geometry
- Geometry
- Grid

- Integers
- Operation
- Infinity Cycle
- permutation
- Modular

- word problem
- op. on nodes
- DP matrix
- Stack vs Queue

GOOGLE | UNIVERSAL UNIVERSITY FB

Recipes
- DP on DAG graph
- Problem to DP table
- BFS/DFS
- Identify Node/Edges

Geometry

Pg. Convex Combination

Cache

$\frac{a(a^n)}{a(a^{n-1})} \rightarrow$ BPS

$\frac{a(a^n)}{a(a^{n-1})} \rightarrow$ 2 way BFS

LINKEDIN

Graph Attack

Google (2020)
- O(1) ≠
- 2 way BFS

Pg. Forest

Pg. 20 points

Geometry
- Graph Contract
- Articulation

Pg. Big Disc

Geometry

DFS/BFS

2020
- Google
- Code Nation

× DSU

PS (optional)

GRIDS

Integers

Operation
- Two Robots (Chocolate)
- 4 voice

Infinite String Construction

Blue Coding

Pg.

Given permutation
1 to N

min. nos of operation to sort it.

op(x)
1 to x

N ≤ 8

4 2 1 5 3

slow

O(n) > N²)

greedy

Pg. Word problem
Big Disc

Trees as generalized Array

DP on Trees

Trees & Catering control

Kadane

Visualization

Goodness of Tree

NP Hard
GOOGLE

Problem → exponential

- number of cycles in graph
N, M

exponential

Bruteforce

SCOPE

O(N!)

A - - - B
exponential

$2^N - N \cdot N^2$

$O(2^N)$

- Max Clique Problem

- TSP
- Max Independent set
- vertex cover

G → subgraph
- max size
- complete graph

exponential

Problem

Max clique problem

Scheduling → maximize
+ve
exponential