

# Silver problem list

Binglun Wang

University College London

25 Feb, 2023

① Problems 1

② Problems 2

③ Problems 3

① Problems 1

② Problems 2

③ Problems 3

## Q1

- <http://usaco.org/index.php?page=viewproblem2&cpid=1278>

## Q1

- `http://usaco.org/index.php?page=viewproblem2&cpid=1278`
- Denote  $a, b, c, \dots, z, A, \dots, Z$  as nodes. Add edges  $[s, t]^T$

## Q2

- <http://www.usaco.org/index.php?page=viewproblem2&cpid=1110>

## Q2

- `http://www.usaco.org/index.php?page=viewproblem2&cpid=1110`
- Each degree = 3 node needs to add a unique node.

① Problems 1

② Problems 2

③ Problems 3



## Q1

- <http://www.usaco.org/index.php?page=viewproblem2&cpid=643>

## Q1

- `http://www.usaco.org/index.php?page=viewproblem2&cpid=643`
- If only one case?

## Q2

- <http://www.usaco.org/index.php?page=jan20results>

## Q2

- <http://www.usaco.org/index.php?page=jan20results>



$$\forall n \in \mathbb{N}_+, \left| \left\lfloor \frac{n}{d} \right\rfloor \mid d \in \mathbb{N}_+, d \leq n \right| \leq \lfloor 2\sqrt{n} \rfloor \quad (1)$$

① Problems 1

② Problems 2

③ Problems 3

## Q1

- <http://www.usaco.org/index.php?page=viewproblem2&cpid=1280>

## Q1

- `http://www.usaco.org/index.php?page=viewproblem2&cpid=1280`
- we construct LR to make peak to flat.

## Q2

- <http://www.usaco.org/index.php?page=viewproblem2&cpid=1184>



## Q2

- `http://www.usaco.org/index.php?page=viewproblem2&cpid=1184`
- Denote Cereal as nodes. Edges with weight - index of cows, direction - priority