ISL Schedule

Problem Description

The Indian Soccer League (ISL) is an annual football tournament.
The group stage of ISL features **N** teams playing against each other with following set of rules:

1. **N** teams play against each other twice - once at Home and once Away

2. A team can play only one match per day

3. A team cannot play matches on consecutive days

4. A team cannot play more than two back to back Home or Away matches

5. Number of matches in a day has following constraints

    o The match pattern that needs to be followed is -

        ▪ Day 1 has two matches and Day 2 has one match,

        ▪ Day 3 has two matches and Day 4 has one match and so on

    o There can never be 3 or more matches in a day

6. Gap between two successive matches of a team cannot exceed floor(N/2) days where floor is the mathematical function floor ()

7. Derby Matches (any one)

    o At least half of the derby matches should be on weekend

    o At least half of the weekend matches should be derby matches

Your task is to generate a schedule abiding to above rules.

Input Format:
First line contains number of teams (**N**).
Next line contains state ID of teams, delimited by space

Output Format:
Match format: **Ta-vs-Tb**
where **Ta** is the home team with id **a** and **Tb** is the away team with id **b**.
For each day print the match(es) in following format: -

- Two matches: - "**#D Ta-vs-Tb Tm-vs-Tn**"

- One match: - "**#D Tx-vs-Ty**"

where D is the day id and [a, b, m, n, x, y] are team ids.

Constraints:
1. 8 <= N <= 100

Note:

- Team ids are unique and have value between 1 to N

- Day id starts with 1

- Every 6th and 7th day are weekends

- Derby is a football match between two teams from the same state

Sample Input and Output

Sr No.	Input	Output
1	8 1 2 5 4 3 1 6 6	#1 T1-vs-T6 T3-vs-T5 #2 T7-vs-T4 #3... and so on

Explanation:

There are 8 teams with following information

Team ID	1	2	3	4	5	6	7	8
State ID	1	2	5	4	3	1	6	6