Company X has multiple building in same location (id 1, 2, 3,….N). Every employee has been assigned to one desk allocated in one of those buildings.

As per company policy, employees can raise request to move desk location from one building to another (e.g. building 2 to 5).

Move request can be of structure:

EmployeeID

buildingFrom

buildingTo

Assume all facilities are completely full. A request from building X to Y is achievable only if someone in building Y made an achievable request to move to other building.

Given a wish list of requests, help them plan for the best way of building swaps. A plan that fulfills the maximum number of requests is considered the best.

Output is list of employee ids on cyclic swaps.

e.g.

Request:

1. [‘E001’, 1, 2]

2. [‘E657’, 2, 1]

3. [‘E085’, 1, 2]

4. [‘E012’, 2, 3]

5. [‘E023’, 3, 1]

6. [‘E079’, 4, 5]

Output:

[[‘E001’, ‘E657’],[‘E085’, ‘E012’, ‘E023’]]