

K. N-th Star

Time Limit: 3 seconds

Problem description

In this competition, suppose there are K ($K \leq 1000$) participating teams. Each team need to do M ($M \leq 200$) tasks. At the end of the competition, each team will receive points for each task the have done. The score of a team is the sum of the points of all tasks. The organizers need to rank the teams from 1 to the end by their score. Teams with equal points will be ranked in the same rank. If there are two teams with the same i rank, there will be no $i+1$ ranked team. The team with the closest score (less than) is ranked $i+2$.

For example, there are 5 teams, each team need to do 3 tasks. The score each team gets for each task is:

- Team 1: 5 8 7 -> Total score: 20
- Team 2: 5 7 8 -> Total score: 20
- Team 3: 2 7 9 -> Total score: 18
- Team 4: 4 5 1 -> Total score: 10
- Team 5: 5 7 6 -> Total score: 18

With the above scoreboard, the teams will be ranked as follows:

Rank	Team
1	Team 1
1	Team 2
3	Team 3
3	Team 5
5	Team 4

Write a program to help the organizers find the N -th team(s) in the competition. Note that, N -th position may belong to some teams or none.

Input:

The format of input is:

- Line 1: K M N where ($0 < K, N \leq 1000$), ($0 < M \leq 200$)
- Each two lines next: The team name and points of M task of this team.

Output:

The output is list of team (arranged in the order of input reading) ranked N-th or the notify message “No team” if no team ranks N-th.

Example 1

Input	Output
5 3 1 Team 1 5 8 7 Team 2 5 7 8 Team 3 2 7 9 Team 4 4 5 1 Team 5 5 7 6	Team 1 Team 2

Example 2

Input	Output
5 3 2 Team 1 5 8 7 Team 2 5 7 8 Team 3 2 7 9 Team 4 4 5 1 Team 5 5 7 6	No team