B: The greatest statistician OAT

By: Luigi Salcedo

Mark has been nominated as the best and fastest football statistician in the world. Because of this, in order to save costs, all football confederations and tournament organizers have decided to fire their other statisticians and hire only Mark.

However, now Mark must track all the statistics from every football match in the world. Normally this would not be a problem for him, but he only received from the organizations a single global list of all currently active players, ordered by the moment they became professional.

When an event happens in a match, Mark does not receive the player's name. Instead, he receives the player's professional number:
For example, if the third professional player in history does something that must be recorded, Mark receives the number.

But not all players are still active. Retired players have been removed from the active list, without changing their original professional number. This means the professional numbers can have gaps, and Mark cannot simply use the professional number as a direct index in his list. To find the player, he would need to scan the entire list every time.

To avoid this, Mark has asked for your help.

Your task is to write a program that, given the list of active players Mark received and several events (each identified by a professional number), determines the position in the list of the player who caused each event and outputs their name.

Input:
The input is structured as follows:

- An integer **t** indicating the number of test cases.

For each test case:

- A line with two integers **n** and **e**:
  - **n** is the number of active players in Mark's list.
  - **e** is the number of events to process.

- Then follow **n** lines, each describing one player:

  - An integer **p**: the player's professional number.
  - A string name: the player's name.
    These players are listed in the exact order Mark received them.

- After that, **e** lines follow.
  Each of these lines contains a single integer q, representing the professional number of the player involved in an event.
  It is guaranteed that each q corresponds to one of the n players listed before.

Output:
For each test case, output e lines.

Each line must contain:

- The position (index) of the player in Mark's list (using 1-based indexing), and
- The name of that player,

separated by a single space, for the corresponding event in the same order as the queries were given.

Input
2 6 3 1 Diaz 2 James 3 Messi 4 Ronaldo 5 Mbappe 6 Yamal 3 6 1 8 10 456 Fabregas 500 Neuer 521 Muller 745 Messi 999 Mbappe 1102 Vinicius 1103 Yamal 1201 Guler 999 745 745 999 1201 1103 500 500 521 521
Output

3 Messi
6 Yamal
1 Diaz
5 Mbappe
4 Messi
4 Messi
5 Mbappe
8 Guler
7 Yamal
2 Neuer
2 Neuer
3 Muller
3 Muller