Subscriptions   X36383_en

There are a number of artists that have recorded albums with tracks. Moreover, there are a number of users subscribed to artists. Print the catalog of artists on the appropriate format, including the subscribed users of each artist.

Input

The input starts with an integer N denoting the number of artists. The next N lines contain the description of each artist on the format "<artist name>-<isGroup>", where <artist name> is the name of the artist and <isGroup> equals "Y" if the artist is a group, and "N" otherwise.

The next line contains an integer M denoting the number of albums. The next M lines contain the description of each album on the format "<artist name>-<album name>-<isListed>", where <artist name> is the name of the artist recording the album, <album name> is the name of the album, and <isListed> equals "Y" if the album is listed, and "N" otherwise.

The next line contains an integer K denoting the number of tracks. The next K lines contain the description of each track on the format "<artist name>-<album name>-<track name>-<master file>-<duration>". Here, <master file> is the name of the sound file containing the track, and <duration> is its duration in seconds.

The next line contains an integer P denoting the number of users. The next P lines contain the description of each user on the format "<user name>-<user email>".

The next line containt an integer Q denoting the number of subscriptions. The next Q lines contain the description of each subscription on the format "<user name>-<artist name>".

Output

For each artist in the order they appear in the input, print its information on the format specified in the example.

Sample input

```
5
Pink Floyd-Y
Guns'N'Roses-Y
Eagles-Y
Queen-Y
The Beatles-Y
5
Pink Floyd-Dark Side Of The Moon-Y
Guns'N'Roses-Appetite For Destruction-N
Eagles-Hotel California-Y
Queen-A Night at the Opera-Y
The Beatles-Revolver-N
6
Pink Floyd-Dark Side Of The Moon-Money-money.wav-390
Pink Floyd-Dark Side Of The Moon-Us and Them-us.wav-471
Guns'N'Roses-Appetite For Destruction-Welcome to the Jungle-jungle.wav-271
Eagles-Hotel California-Hotel California-hotel.wav-390
Queen-A Night at the Opera-Bohemian Rhapsody-bohemian.wav-357
The Beatles-Revolver-Yellow Submarine-submarine.wav-159
```

```
2
A user-a@mail.org
Another user-another@mail.org
4
A user-Pink Floyd
Another user-Queen
A user-Eagles
Another user-The Beatles
```

Sample output

```
Pink Floyd [group]
        Money [390s]
                money.wav
        Us and Them [471s]
                us.wav
Album: Dark Side Of The Moon
1 - Money [390s]
2 - Us and Them [471s]
A user
Guns'N'Roses [group]
        Welcome to the Jungle [271s]
                jungle.wav
Album: Appetite For Destruction [unlisted]
1 - Welcome to the Jungle [271s]
Eagles [group]
```

```
        Hotel California [390s]
                hotel.wav
Album: Hotel California
1 - Hotel California [390s]
A user
Queen [group]
        Bohemian Rhapsody [357s]
                bohemian.wav
Album: A Night at the Opera
1 - Bohemian Rhapsody [357s]
Another user
The Beatles [group]
        Yellow Submarine [159s]
                submarine.wav
Album: Revolver [unlisted]
1 - Yellow Submarine [159s]
Another user
```

Problem information

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