
2. Butterflies

Program Name: Butterflies.java

Input File: butterflies.dat

Jane has a database of butterflies that are in the area near where she lives. She needs you to write a program that will search the data base and print a list of all the butterflies that are a particular color.

Input

The first line will contain a single integer n that indicates the number of lines in the database followed by the database. Each line of the database will contain the name of one butterfly, a comma, a space and that butterfly's dominant color. The line following the database will contain a single integer m that represents the number of lines to follow. Each of the following m lines will contain a single color. The names of all butterflies and colors will be uppercase letters.

Output

For each color, print the color followed by a colon. Then, in alphabetical order and on separate lines, print the names of the butterflies in the database that have that color. Print a blank line between the color groups.

Example Input File

```
10
MONARCH, ORANGE
CLOUDED SULPHUR, YELLOW
LYSCIDE SULPHUR, YELLOW
PAINTED LADY, ORANGE
GIANT SWALLOWTAIL, BLACK
CLOUDLESS SULPHUR, YELLOW
BLACK SWALLOWTAIL, BLACK
TIGER SWALLOWTAIL, YELLOW
GULF FRITILLARY, ORANGE
SOUTHERN DOGFACE, YELLOW
2
YELLOW
BLACK
```

Example Output to Screen

```
YELLOW:
CLOUDED SULPHUR
CLOUDLESS SULPHUR
LYSCIDE SULPHUR
SOUTHERN DOGFACE
TIGER SWALLOWTAIL

BLACK:
BLACK SWALLOWTAIL
GIANT SWALLOWTAIL
```