

Shopping - HDU 2648

<https://vjudge.net/problem/HDU-2648>

Every girl likes shopping,so does dandelion.Now she finds the shop is increasing the price every day because the Spring Festival is coming .She is fond of a shop which is called "memory". Now she wants to know the rank of this shop's price after the change of everyday.

Input

One line contains a number n ($n \leq 10000$),stands for the number of shops.

Then n lines ,each line contains a string (the length is short than 31 and only contains lowercase letters and capital letters.)stands for the name of the shop.

Then a line contains a number m ($1 \leq m \leq 50$),stands for the days .

Then m parts , every parts contains n lines , each line contains a number s and a string p ,stands for this day ,the shop p 's price has increased s .

Output

Contains m lines ,In the i th line print a number of the shop "memory" 's rank after the i th day. We define the rank as :If there are t shops' price is higher than the "memory" , than its rank is $t+1$.

Sample Input

```
3
memory
kfc
wind
2
49 memory
49 kfc
48 wind
80 kfc
85 wind
83 memory
```

Sample Output

```
1
2
```