

I Love Strings!!

Time Limit: 3s

Hmmmmmm..... strings again :) Then it must be an easy task for you. Well . . . you are given with a string S of length not more than 100,000 (only 'a'-'z' and 'A'-'Z'). Then follows q ($q < 1000$) queries where each query contains a string T of maximum length 1,000 (also contains only 'a'-'z' and 'A'-'Z'). You have to determine whether or not T is a sub-string of S.

Input

First line contains an integer k ($k < 10$) telling the number of test cases to follow. Each test case begins with S. It is followed by q. After this line there are q lines each of which has a string T as defined before.

Output

For each query print 'y' if it is a sub-string of S or 'n' otherwise followed by a new line. See the sample output below.

Sample Input

```
2
abcdefghABCDEFGH
2
abc
abAB
xyz
1
xyz
```

Sample Output

```
y
n
y
```