

# Lexicographic sort

Given alphabet  $A$  and a list of words, sort the list according to the lexicographic order induced by  $A$ .

## Input

The first line of input contains  $t$ , the number of tests.

Each test begins with a line with alphabet  $A$ , which consists of lowercase letters arbitrary chosen from the Latin alphabet. The next line contains an integer  $n < 100\,000$  - the number of words. The subsequent  $n$  contain one word each, which is not longer than 1 000 letters. Additionally, you can assume that the total number of letters in all words of each test does not exceed  $4 \cdot 10^6$ .

There is an empty line after each test.

## Output

For each test output the sorted list of words in successive lines.

## Score

The score is equal to the length of the source code of your program.

## Example

### Input:

```
2
re
3
ere
rer
re
```

```
balujemy
```

```
5
bel
luba
lej
bal
leje
```

### Output:

```
re
rer
ere
```

```
bal
bel
luba
lej
leje
```

**Warning:** large Input/Output data, be careful with certain languages