

# Problem SCRATCHNUMS: Scratched Part Numbers

Bob stores all his building material in a huge pile in his warehouse. The materials are stacked in a chaotic way. But that is no problem, as every part has its part number printed anywhere on its package. It is quite inefficient to search for particular parts, but Bob always finds what he needs. Earlier today Bob had to find some steel rods. After searching them for hours, he graped them in a hurry, because he was already too late. Some of the rods got stuck and after pulling harder, he scratched parts of other packages part numbers with the edges of the rods. After delivering the rods, Bob returned to his warehouse and tried to fix the broken numbers. But he failed and now asks you for help. Beside the remains of the numbers, he shows you some catalogs, which contains all possible part numbers.

## Input

In the first line the number  $n$  of part numbers in the catalogs and the number  $m$  of partial reconstructed part numbers is given ( $0 < n, m \leq 100\,000$ ).  $n$  lines with one part number of the catalogs and  $m$  lines with one partial part number of one package follows. The part numbers of the different catalogs consist of up to 20 characters (only upper case letters, lower case letters, numbers and “-” are used). The part numbers in the catalogs are all unique. The partial part numbers of the packages consist of the same characters, but at some positions of the number the characters may be missing. The missing characters are given as spaces (one for every missing character). Luckily every part number has only one location of consecutive spaces.

## Output

For every partial part number, print the complete part number, if you find a unique solution. Print “not found”, if you cannot find a matching part number in the catalogs. If more than one catalogs part number could match the package part number print “not unique”.

### Sample Input 1

```
4 4
STUFF-1012-001
THING-0002-003
STUFF-2012-001
T112d1
THING-    -003
ST      012-001
STEEL 1012-001
```

1

### Sample Output 1

```
THING-0002-003
not unique
not found
T112d1
```