Acronyms

Problem ID: acronym

You've probably all heard of the likes of FAANG (Facebook Amazon Apple Netflix Google) or MAMAA (Meta Apple Microsoft Amazon Alphabet). The point is, these fancy-pants stock investors love their acronyms. However in this changing world with constant renaming and rebranding, these acronyms don't stay relevant for long. Facebook became Meta. Google gained a parent company in the form of Alphabet. Microsoft became the world's most valuable company after Apple shares dipped. With their love of acronyms staying strong, these investors have come to you with a serious problem that they need a serious solution for. Given a list of companies and a target acronym, they want you to provide a single list of companies that fit with the acronym. Since these are some fickle investors, they want you to prioritize the companies by the order they come in. Like for example, if target acronym contains an M, and the list of companies has Microsoft, Mapple, and Metflix, then Microsoft is the one used in the acronym. If there were two Ms, then the first M would be Microsoft, and the second M would be Mapple. Thus if the target acronym is MM, the the output string would be 'Microsoft Mapple'.

Input

The input consists of a single test case. The first line contains a single string with no spaces which is the target acronym. The length of that string will be at least 1 character and at most 1000 characters long $1 \le size \le 1000$. That is followed by an integer n $1 \le n \le 10^6$, denoting the number of companies which follow. Then there are n lines which are unique strings that are the names of the companies. All strings start with a capital letter. They are at most 1000 characters long $1 \le size \le 1000$.

Large amounts of input. May require fast io options.

Output

Print out a single line consisting of names of companies matched to the letters in the acronym in order of when they appear in the input. Each company name string should be seperated by a space.

Sample Input 1	Sample Output 1
Sample imput i	Sample Output 1

FAANG	Facebook Amazon Apple Netflix Google
10	
Kitty	
Cat	
Microsoft	
Mapple	
Google	
Facebook	
Amazon	
Netflix	
Apple	
IBM	