3338 - Cryptoquote

Description

A cryptoquote is a simple encoded message where one letter is simply replaced by another throughout the message. For example:

Encoded: HPC PJVYMIY
Decoded: ACM CONTEST

In the example above, H=A, P=C, C=M, J=O, V=N, Y=T, M=E and I=S. For this problem, you will decode messages.

Input specification

The first line of input contains a single integer N, (1 <= N <= 1000) which is the number of data sets that follow. Each data set consists of two lines of input. The first line is the encoded message. The second line is a 26 character string of upper case letters giving the character mapping for each letter of the alphabet: the first character gives the mapping for A, the second for Band so on. Only upper case letters will be used. Spaces may appear in the encoded message, and should be preserved in the output string.

Output specification

For each data set, you should generate one line of output with the following values: The data set number as a decimal integer (start counting at one), a space and the decoded message.

Sample input

```
2
HPC PJVYMIY
BLMRGJIASOPZEFDCKWYHUNXQTV
FDY GAI BG UKMY
KIMHOTSQYRLCUZPAGWJNBVDXEF
```

Sample output

```
1 ACM CONTEST
2 THE SKY IS BLUE
```

Hint(s)

Source	ACM-ICPC Greater New York Regional Contest
Added by	**kko**
Addition date	2015-06-23
Time limit (ms)	1000
Test limit (ms)	1000
Memory limit (kb)	268435456
Output limit (mb)	64
Size limit (bytes)	16384
Enabled languages	Bash C C# C++ C++11 Java JavaScript-NodeJS Pascal Perl PHP Prolog Python Ruby Text