Problem 64: Hidden Messages

Difficulty: Easy

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Problem Background

You have been asked to decode a secret message.

Problem Description

A General Decoder takes a set of input strings. The first string is the English alphabet encoded in the order needed to decode the subsequent strings of numbers.

For example, the sequence:

18-5-1-4 20-8-9-19 13-5-19-19-1-7-5

Can be decoded by applying the alphabet order:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

To read:

READ THIS MESSAGE

Your task is to write a program that will take as inputs a decoding key and an encoded message, and output the decoded message.

Sample Input

The first line of your program's input, received from the standard input channel, will contain a positive integer representing the number of test cases. Each test case will include:

- The alphabet decoding key on the first line
- The remaining lines are the encoded messages, one per line.
- Numbers correspond to the position of the letter they represent in the decoding key, and are separated by either a dash or a space.
- Dashes are used to separate letters within a word, and spaces denote word boundaries.
- There will be no numbers less than 1 or greater than 26.

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4
AEIOUYBCDFGHJKLMNPQRSTVWXZ
22-24-4 20-4-1-9-21 9-3-23-2-20-11-2-9 3-17 1 24-4-4-9 1-17-9 3
3 22-4-4-14 22-12-2 4-17-2 15-2-21-21 22-20-1-23-2-15-2-9 7-6
1-17-9 22-12-1-22 12-1-21 16-1-9-2 1-15-15 22-12-2 9-3-10-10-2-20-2-17-8-2
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Sample Output

Your program should output the decoded message.

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TWO ROADS DIVERGED IN A WOOD AND I
I TOOK THE ONE LESS TRAVELED BY
AND THAT HAS MADE ALL THE DIFFERENCE
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