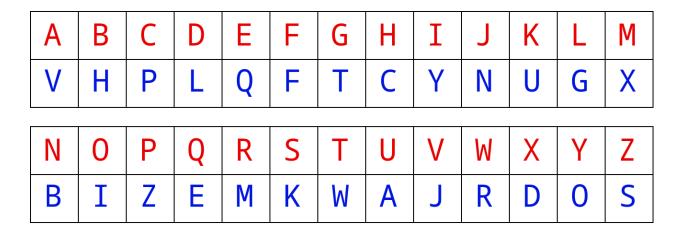# Problem E: Broken Messages

Team Rocket wants to send messages amongst their operatives without local authorities or meddlesome trainers being able to read them. To communicate safely, Team Rocket uses a simple substitution cipher for their messages. This works by mapping one letter onto another. For example, the cipher might look like this:

A	B	C	D	E	F	G	H	I	J	K	L	M
V	H	P	L	Q	F	T	C	Y	N	U	G	X

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
B	I	Z	E	M	K	W	A	J	R	D	O	S

Then, when Team Rocket wants to send a message, they replace each letter with the one it is mapped to. For the example cipher above, the word "cafe" would be encoded as "pvfq".

When an operative receives a message they use the same substitution scheme to decode the message. (Each Team Rocket operative is issued a book with all of the different substitutions and when to use them).

Unfortunately, many Team Rocket operatives are not very careful, and make mistakes when doing the substitution. This can lead to all kinds of trouble.

Your goal is to read in the original message, and the encoded message, and check for potential mistakes the operative may have made in the substitution. To do this, you will look for the following potential errors:

1. Two identical characters in the original message being encoded differently. For example, in "weedle" -> "fqrbxp", the two e's have different substitutions indicating an error.

2. Two identical characters in the encoded message corresponding to different characters in the original message. For example, in "froakie" -> "ppciwkl", f and r are both encoded as p, also indicating an error.

Of course, it would be better for Team Rocket to use a computer program to do the substitution in the first place, but Team Rocket did not get where it is today by making good decisions.

Input

Input will consist of two lines of lowercase letters, spaces, and punctuation. The first line is the original message, while the second is the encoded message.

Spaces and punctuation are not encoded, and you can assume there are no errors in these characters.

Output

If you detect an error, your program should output "Error detected." Otherwise, it should output "No error detected."

Sample Input

```
we will steal pikachu at midnight!
av azoo hqvfo emufykt fq dzmszpkq!
```

Sample Output

```
Error detected.
```