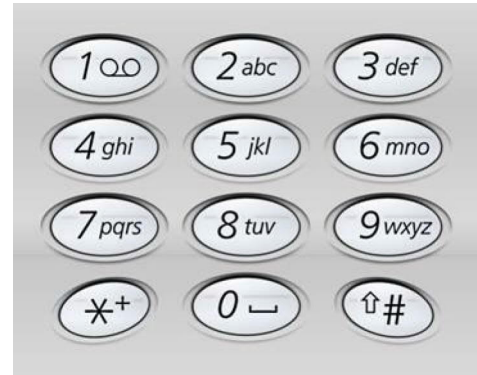


## Texting

An old cellphone with buttons has alphabets indicated in each buttons as shown in a picture on the right, so we can text.

To choose an alphabet, press a button with associated character. Pressing a button once input 1<sup>st</sup> character, press quickly twice input the 2<sup>nd</sup> character, (pressing 2 -> a, pressing 22 -> b, and pressing 222 -> c) . If you want two consecutive a, press 2 and wait half a second before press 2 again. Press 0 to input a space. Press \* or # to switch between lowercase and uppercase (Not important in this question)



In this question, You must write 2 functions

- **text2keys( text )** Receive String **text** and return sting of numbers and space (space represent a pause when pressing buttons) that you must press to get that message **text**. For example, **text2keys( "Ok, Python" )** will return **"666 55 0 7 999 8 44 666 66"**
  - **text** can be either uppercase or lowercase, we consider them as the same
  - Ignore every other character in **text** that's not English alphabet or space

**Keys2text( key )** Receive String **keys** and return a sting of message that you get from pressing button in order shown in **key**. For example

**keys2text( "666 55 0 7 999 8 44 666 66"** will return **"ok python"**

```
def text2keys( text ) :  
  
def keys2text( keys ) :  
  
# You must have this command below when submit to grader  
exec(input().strip())
```

## Input

Command in Python language to test a function

## Output

Return output from a function call in input

## Example

Input (from keyboard)	Output (on screen)
<code>print(text2keys("I am busy."))</code>	<code>444 0 2 6 0 22 88 7777 999</code>
<code>print(keys2text("444 0 2 6 0 22 88 7777 999"))</code>	<code>i am busy</code>