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## Problem 4: The Keypad

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### Statement

In the final stages of Harry Potter's adventures, Hogwarts was under control by professor Snape and the Voldemort clan. Our hero wasn't able to get in Hogwarts walls. So Neville and some of his friends came up with this idea to send Harry encrypted messages from inside the walls of the school without getting caught. The idea was similar to the old phone's keypad, where each button contains a number and several letters.

Will you be able to decrypt the messages that Harry receives?

**Note:** clicking the button with the label 2 four times outputs the same letter as clicking it once, and so on for all the buttons.



## Input

N the length of the sequence.

A sequence of positive integers separated by blank spaces.

## Output

Output the corresponding message.

## Example

Input	Output
12 44 2222 777 777 999 0 7 666 8 8 33 777	harry potter