JAVA programmers: your program name must be: Prob11.class
C programmers: your program name must be: prob11.exe

## Task Description

Some LED systems display characters as a combination of light segments, much like some calculators or gas pumps do. Suppose we have such an LED system, in which each letter of the standard English alphabet is constructed by combining some of ten possible light segments, numbered as shown at right: For instance, the letter A is shown using the lines 1,2,3,4,5 and 7. With these few segments, it is not possible, of course, to show all the 26 letters with their natural shapes. A complete list of the letters of our system is shown below. Your task is to translate a combination of numbers (representing light segments) into their respective letters, finally forming a whole word or phrase. Your input is a string of letters and/or numbers. Your output will be a string of letters.
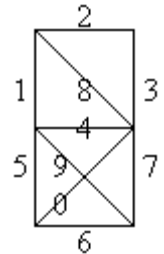
Program Input

The input is a file Prob11.in containing a single line representing an input phrase. Each input phrase consists of all uppercase letters, blank spaces and/or digits. In the case of digits, their combination must form valid LED letters. Each letter is encoded as a combination of numbers, ordered in the form 1,2,3,4,5,6,7,8,9,0. A zero (0) that is not part of a valid letter code is interpreted as a blank space. You may assume that no invalid codes are entered, and that the system does not allow ambiguity between two letter codes.
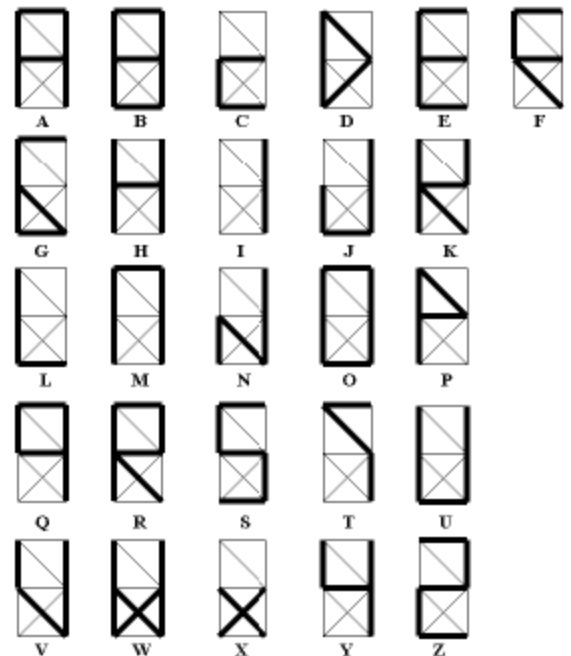
Program Output

Output the results of the decoding process. The alphabetic letters and blank spaces must not be decoded at all: only the numbers must be converted to the corresponding LED letters.

Sample Input/Output

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Phrase: HELL1235670WO1234591561580
HELLO WORLD

Phrase: PROGRAMMING037124670C123567123567156
PROGRAMMING IS COOL

Phrase: AND MORE037124903735790278134573712467045612356735792781245612467278
AND MORE IF IN THIS CONTEST
```