

Problem H. Crossword Puzzle

OS Linux

A 10×10 Crossword grid is provided to you, along with a set of words (or names of places) which need to be filled into the grid. Cells are marked either $+$ or $-$. Cells marked with a $-$ are to be filled with the word list.

The following shows an example crossword from the input *crossword* grid and the list of words to fit, *words* = [POLAND, LHASA, SPAIN, INDIA]:

Input	Output
+++++++	+++++++
+-----+	+POLAND+++
+++-----+	+++H+++++
+++-----+	+++A+++++
+++-----+	+++SPAIN++
+++-----+	+++A++N+++
+++++-----	+++++D+++
+++++-----	+++++I+++
+++++-----	+++++A+++
+++++++	+++++++
POLAND;LHASA;SPAIN;INDIA	

Function Description

Complete the *crosswordPuzzle* function in the editor below. It should return an array of strings, each representing a row of the finished puzzle.

crosswordPuzzle has the following parameter(s):

- *crossword*: an array of **10** strings of length **10** representing the empty grid
- *words*: a string consisting of semicolon delimited strings to fit into *crossword*

Input Format

Each of the first **10** lines represents *crossword*[*i*], each of which has **10** characters, *crossword*[*i*][*j*].

The last line contains a string consisting of semicolon delimited *words*[*i*] to fit.

Constraints

$$1 \leq |words| \leq 10$$

$$crossword[i][j] \in \{+, -\}$$

$$words[i][j] \in ascii[A - Z]$$

Output Format

Position the words appropriately in the 10×10 grid, then return your array of strings for printing.

Sample Input 0

```
+ - + + + + + + +
+ - + + + + + + +
+ - + + + + + + +
+ - - - - + + + +
+ - + + + - + + +
+ - + + + - + + +
+ + + + + - + + +
+ + - - - - - + +
+ + + + + - + + +
+ + + + + - + + +
LONDON ; DELHI ; ICELAND ; ANKARA
```

Sample Output 0

```
+ L + + + + + + +
+ O + + + + + + +
+ N + + + + + + +
+ D E L H I + + + +
+ O + + + C + + + +
+ N + + + E + + + +
+ + + + + L + + + +
+ + A N K A R A + +
+ + + + + N + + + +
+ + + + + D + + + +
```

Sample Input 1

```
+ - + + + + + + +
+ - + + + + + + +
+ - - - - - - + +
```

+ - + + + + + + + +

+ - + + + + + + + +

+ - - - - - + + +

+ - + + + - + + + +

+ + + + + - + + + +

+ + + + + - + + + +

+ + + + + + + + + +

AGRA ; NORWAY ; ENGLAND ; GWALIOR

Sample Output 1

+E + + + + + + + +

+N + + + + + + + +

+GWALIOR++

+L + + + + + + + +

+A + + + + + + + +

+NORWAY+++

+D+++G++++

+ + + + + R + + + +

+ + + + + A + + + +

+ + + + + + + + + +

Sample Input 2

+ + + + + + - + + +

+ + - - - - - + +

+ + + + + + - + + +

+ + + + + + - + + +

+ + + - - - - - +

+ + + + + + - + - +

+ + + + + + - + - +

+ + + + + + + + - +

+ + + + + + + + - +

+ + + + + + + + - +

ICELAND ; MEXICO ; PANAMA ; ALMATY

Sample Output 2

+ + + + + + I + + +

++MEXICO++

+ + + + + + E + + +

++++++L+++

+++PANAMA+

++++++N+L+

++++++D+M+

+++++++A+

+++++++T+

+++++++Y+