

MFJ Programming Challenge

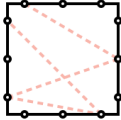
Use whatever language/tools you want.

Letter Boxed

NYT has a game called "Letter Boxed". It's a square with three (ASCII) letters to a side, and you try to use up all the letters by making a series of words. Here are the rules:

How to Play

Create words using letters round the square



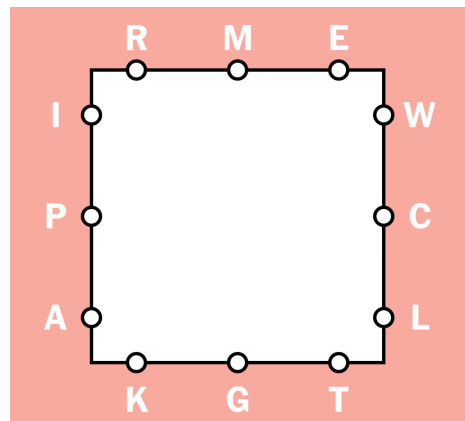
- Connect letters to spell words
- Words must be at least 3 letters long
- Letters can be reused
- Consecutive letters cannot be from the same side
- The last letter of a word becomes the first letter of the next word
e.g. THY > YES > SINCE
- Use all letters to solve!

New puzzles are released daily at 3 a.m. ET.

Have feedback? Email us at NYTCrossword@nytimes.com.

A given letter only appears once on a puzzle grid. In case it's not obvious, a solution word also couldn't use a double letter combination, since a letter is always on the same side as itself.

Here's an example puzzle:



Write a program that:

1. loads a word dictionary file (one word or phrase per line) (see words.txt)
2. takes a puzzle grid as a string (the above puzzle could be represented as "RME,WCL,KGT,IPA", "LWC,GTK,ERM,PIA" or any other topological equivalent)
3. returns all valid two-word solutions to the puzzle given the loaded dictionary