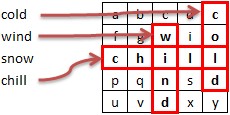
Word Finder+

You have a character matrix and a word dictionary. Your task is to create code that searches the input matrix and finds the words from the dictionary. Words may appear horizontally, from left to right, or vertically, from top to bottom. In the sample below the dictionary of search words contains four words, and the matrix to search contains only three words ("chill", "cold" and "wind"):



Your code should have the following:

* Inputs:
  + Character matrix
  + List of strings to check against the matrix
* Output:
  + Show which words are found within the matrix and which ones are not
* Other constraints:
  + Input strings for checking should not be grater then 10 characters
  + Input string for checking should be greater than 2 characters
  + Matrix can be any size but will always be square
  + All English characters and words.
  + You should never be able to search for nothing.

Please note

* The solution must be written in C#
* Both functionality and elegance are important.
* Please include unit tests.
* There are no tricks in this task. Please do not try to bring unnecessary complexity into the solution.
* Your output can be in any form console/webpage/file/etc.
* Any assumptions should be written in comments in code or via a readme file.
* Please zip your project and send it via email or send a link to your code.
  + If you send a link, please make sure your repo/dropbox/google drive/etc is public.

## Samples:

Matrix:

USIMMLECJJQTJQCPNZTZ

VTOOTGRCBAWAYUWSJWUA

FUDDPDEOLBROCKGKWVCZ

CGDQOSTSHURNICEYYFOU

FUEVELJFVIQIXVCMFGLG

ZKSMSTMBSKENWRDTVYDT

JUZUUFFPWMDTCOWUGISU

MNGNFSEJFAKESLSLXJDC

UXMOSFBIQOHROIYTBBYZ

VCCCJZKRDWFFIAMFJPGO

JTFRDRTHWSUANWINDOIW

QLPDCXJEOTNCSCHILLRH

SNOWFOHPYRIETEKZXDMN

NEJUQEYLYGPOABGRJPQV

TYIVLGKBKRXLNNILMWTK

ASUTPBDDWZKTCUCJTYMD

ZGOKBKBAEMNUETWDGCJJ

EYEHGIAWQEOTHYMZFYUZ

HVTPABGUFNUBGYKGNLYS

KXHZJILKNCLASSBFVAXA

Using the matrix above:

Input strings of cold, snow, red, blue should find cold and snow and not red and blue.

Full list of words found in the above matrix:

cold

wind

snow

chill

class

interface

instance

way

rock