

# Word Search

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Question

Solution

Total Accepted: **52010** Total Submissions: **247689** Difficulty: **Medium**

Given a 2D board and a word, find if the word exists in the grid.

The word can be constructed from letters of sequentially adjacent cell, where "adjacent" cells are those horizontally or vertically neighboring. The same letter cell may not be used more than once.

For example,

Given **board** =

```
[
  ["ABCE"],
  ["SFCS"],
  ["ADEE"]
]
```

**word** = "ABCCED" , -> returns true ,

**word** = "SEE" , -> returns true ,

**word** = "ABCB" , -> returns false .


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Python ▼



```
1 class Solution(object):
2     def exist(self, board, word):
3         """
4         :type board: List[List[str]]
5         :type word: str
6         :rtype: bool
7         """
8      Send Feedback \(mailto:admin@leetcode.com?subject=Feedback\)
    row = len(board)
```

```
9         col = 0 if row==0 else len(board[0])
10        for i in range(row):
11            for j in range(col):
12                if board[i][j]==word[0]:
13                    board[i][j]=0
14                    if self.wordSearch(board,word[1:],i,j):return True
15                    board[i][j]=word[0]
16        return False
17    def wordSearch(self,board,word,x,y):
18        row = len(board)
19        col = 0 if row==0 else len(board[0])
20        if len(word)==0:return True
21        step=[[-1,0],[0,1],[1,0],[0,-1]]
22        for i in range(4):
23            sx=x+step[i][0]
24            sy=y+step[i][1]
25            if sx<0 or sx>=row:continue
26            if sy<0 or sy>=col:continue
27            if board[sx][sy]==word[0]:
28                board[sx][sy]=0
29                if self.wordSearch(board,word[1:],sx,sy):return True
30                board[sx][sy]=word[0]
```

Custom Testcase ☐

Run Code

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