

## Boggle Solver Part - 1

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# put your code for loadBoard, printBoard, possibleMoves here.
def loadBoard(filename):
    #create the list
    board = []
    #open the file
    with open(filename, "r") as file:
        #read the lines in the file
        for line in file:
            #get rid of all the white space
            row = line.strip()
            #add to the list
            board.append(row)
    return board

def printBoard(board):
    #loop through the rows
    for row in board:
        #print each row
        print(row)

def possibleMoves(position, board):
    #rows and cols are x y
    row,col = position
    #create moves list
    moves = []
    #check all directions
    for change_row in [-1, 0, 1]:
        for change_col in [-1, 0, 1]:
            #0,0 would be no change so we can skip that
            if change_row == 0 and change_col == 0:
                continue
            #set the new row and col using our change
            new_row = row + change_row
            new_col = col + change_col
            #then check if they're in the bounds
            if (new_row < 0 or new_row >= len(board)) or (new_col < 0 or
new_col >= len(board[0])):
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        continue
    #add to the list
    moves.append( (new_row,new_col) )
print(moves)
```

```
PS C:\Users\ewf08\OneDrive\Desktop\Assignment 1> & C:/Users/ewf08/AppData/Local/Microsoft/WindowsApps/python3.10.exe "c:/Users/ewf08/OneDrive/Desktop\Assignment 1\02_test.py"
>>> myBoard = loadBoard('board.txt') #loads the specified file into a myBoard variable

>>> printBoard(myBoard)
J O P Y
C M P V
X F E G
P G V U

>>> possibleMoves((0,0), myBoard)
[(0, 1), (1, 0), (1, 1)]

>>> possibleMoves((2,2), myBoard)
[(1, 1), (1, 2), (1, 3), (2, 1), (2, 3), (3, 1), (3, 2), (3, 3)]
PS C:\Users\ewf08\OneDrive\Desktop\Assignment 1>
```