[CS 11] Prac 8n – Maze Drawing II

Problem Statement

Given a maze, please redraw it in a different style. For example, if the input maze is:

```
##################
#   #   #        #
### ### ### ######
#   # #          #
# ### # # ########
# # # # #        #
# # # ### ########
# # # # # #      #
# # # # # # ######
# #     # #      #
# ### # # # ### #
#     #        # #
##################
```

then you need to redraw it as:

```
 ___ ___ ___ ___ ___ ___ ___ ___
|       |       |               |
|___    |___    |___      ___ ___|
|       |   |                   |
|    ___|   |         ___ ___ ___|
|   |   |   |   |               |
|   |   |   |___|     ___ ___ ___|
|   |   |   |   |   |           |
|   |   |   |   |   |    ___ ___|
|   |           |   |           |
|   |___        |   |    ___    |
|           |               |   |
|___ ___ ___|___ ___ ___ ___|___|
```

Task Details

Your task is to implement a function called `redraw_maze`. This function has a single parameter: a `tuple` of `str`s.

The function must return a `list` of `str`s representing the redrawn maze.

Restrictions

(See 8a for more restrictions)

For this problem:

- Loops and lists are allowed.
- Up to 18 function definitions are allowed.
- Recursion is **disallowed**. (The recursion limit has been greatly reduced.)
- Sets and dictionaries are allowed.
- Generators and comprehensions are allowed.
- The source code limit is 4000.

Example Calls

Example 1 Function Call

```
redraw_maze((
    '##################',
    '#   #   #       #',
    '### ### ### #####',
    '#   # #         #',
    '# ### # # #######',
    '# # # # #       #',
    '# # # ### #######',
    '# # # # # #     #',
    '# # # # # # #####',
    '# #     # #     #',
    '# ### # # # ### #',
    '#     #       # #',
    '##################',
))
```

Example 1 Return Value

```
[
    ' ___ ___ ___ ___ ___ ___ ___ ___ ',
    '|       |       |               |',
    '|___    |___    |___      ___ ___|',
    '|       |   |                   |',
    '|    ___|   |         ___ ___ ___|',
    '|   |   |   |   |               |',
    '|   |   |   |___|     ___ ___ ___|',
    '|   |   |   |   |   |           |',
    '|   |   |   |   |   |    ___ ___|',
    '|   |           |   |           |',
    '|   |___        |   |    ___    |',
    '|           |               |   |',
    '|___ ___ ___|___ ___ ___ ___|___|',
]
```

Example 1 Explanation

Hint: You can print a grid of `str`s by doing:

```
for row in grid:
    print(row)
```

or by doing

```
print(*grid, sep='\n')
```

Constraints

- The function `redraw_maze` will be called at most 20 times.
- $3 \leq r, c \leq 75$
- The input is a valid maze.

Scoring

- You get 150 ❤️ points if you solve all test cases.

Clarifications

Report an issue

No clarifications have been made at this time.