

[CS 11] Prac 8o – Maze Drawing III

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.

Submit solution

[CS 11]

Practice 8 

✓ **Points:** 150  (partial)

🕒 **Time limit:** 4.0s

📦 **Memory limit:** 1G

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➤ **Problem type**

▼ **Allowed languages**
NONE, py3