[CS 11 25.1] HOPE 3 – Hexagons

Cheatsheet is available here: https://oj.dcs.upd.edu.ph/cs11cheatsheet/

Problem Statement

You have recently become fascinated with hexagons. So fascinated, in fact, that you want to draw them in all styles and sizes!

We say that the *side length* of a hexagon is the number of characters you need to draw an edge. So the following hexagons have side lengths 2, 3, and 4 respectively:
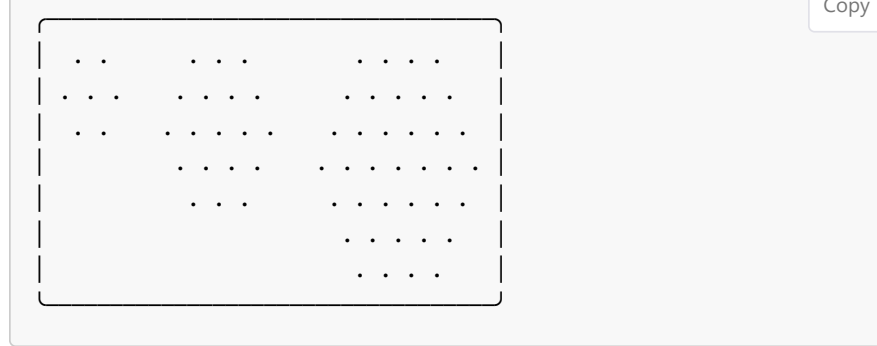

Given some parameters, can you draw a hexagon with those parameters?

Task Details

Your task is to implement a function named `draw`, which should have the following arguments:

- `s` is an integer denoting the side length of the hexagon.
- `char` is a string of length 1 denoting the character used to draw the hexagon. This should be an **optional** argument whose default value is `.`.
- `hollow` is a boolean denoting whether the hexagon drawn should be hollow or not. This should be an **optional** argument whose default value is `False`.

For your reference, the "hollow" versions of the hexagons above are as follows:
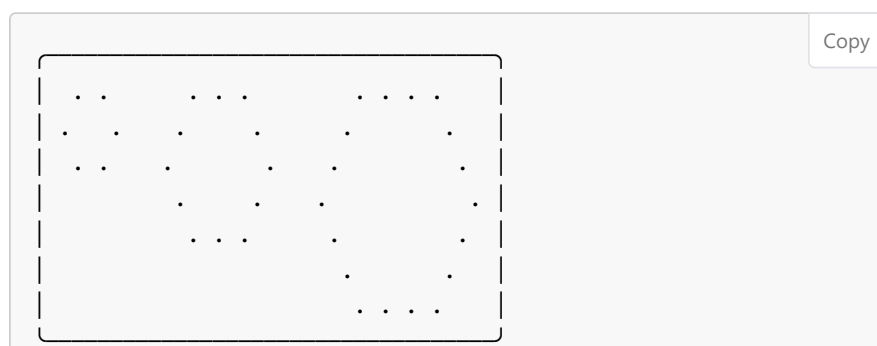
The function should return a list of strings, where each string is a row of the hexagon you draw.

Note that this list should have length $2s - 1$, and each string should have length $4s - 3$.

Restrictions

Your source code must have at most $1,500$ bytes.

Examples

Example 1 Function Call

```
draw(2)
```

Example 1 Return Value

```
[
    " . . ",
    " . . . ",
    " . . ",
]
```

Example 2 Function Call

```
draw(2, char='*')
```

Example 2 Return Value

```
[
    " * * ",
    "* * *",
    " * * ",
]
```

Example 3 Function Call

```
draw(2, char='_', hollow=True)
```

Example 3 Return Value

```
[
    " _ _ ",
    "_   _",
    " _ _ ",
]
```

Constraints

- The function `draw` will be called at most 50 times.
- $2 \leq s \leq 80$
- `char`, if passed, will be an ASCII character.

Scoring

Note: New tests may be added and all submissions may be rejudged at a later time. (All future tests will satisfy the constraints.)

- You get 80 ❤️ points if you solve all test cases where:
  - `char` and `hollow` will never be passed.
- You get 110 🔴 points if you solve all test cases where:
  - `hollow` will never be passed.
- You get 60 🔴 points if you solve all test cases.

❓ Clarifications

Report an issue

No clarifications have been made at this time.

Submit [CS 11 25.1] HOPE 3

- **Points:** 25U (partial)
- 🕐 **Time limit:** 12.0s
- ▦ **Memory limit:** 2G

- › **Problem type**
- ⌄ **Allowed languages**
  - py3