Interactive Coding Exercises

Exercise 3 - Treasure Map

Overview | My Submissions/Test Runs

Instructions

You are going to write a program that will mark a spot with an `X`.

In the starting code, you will find a variable called `map`.

This `map` contains a nested list. When `map` is printed this is what the nested list looks like:

[['□', '□', '□'],['□', '□', '□'],['□', '□', '□']]

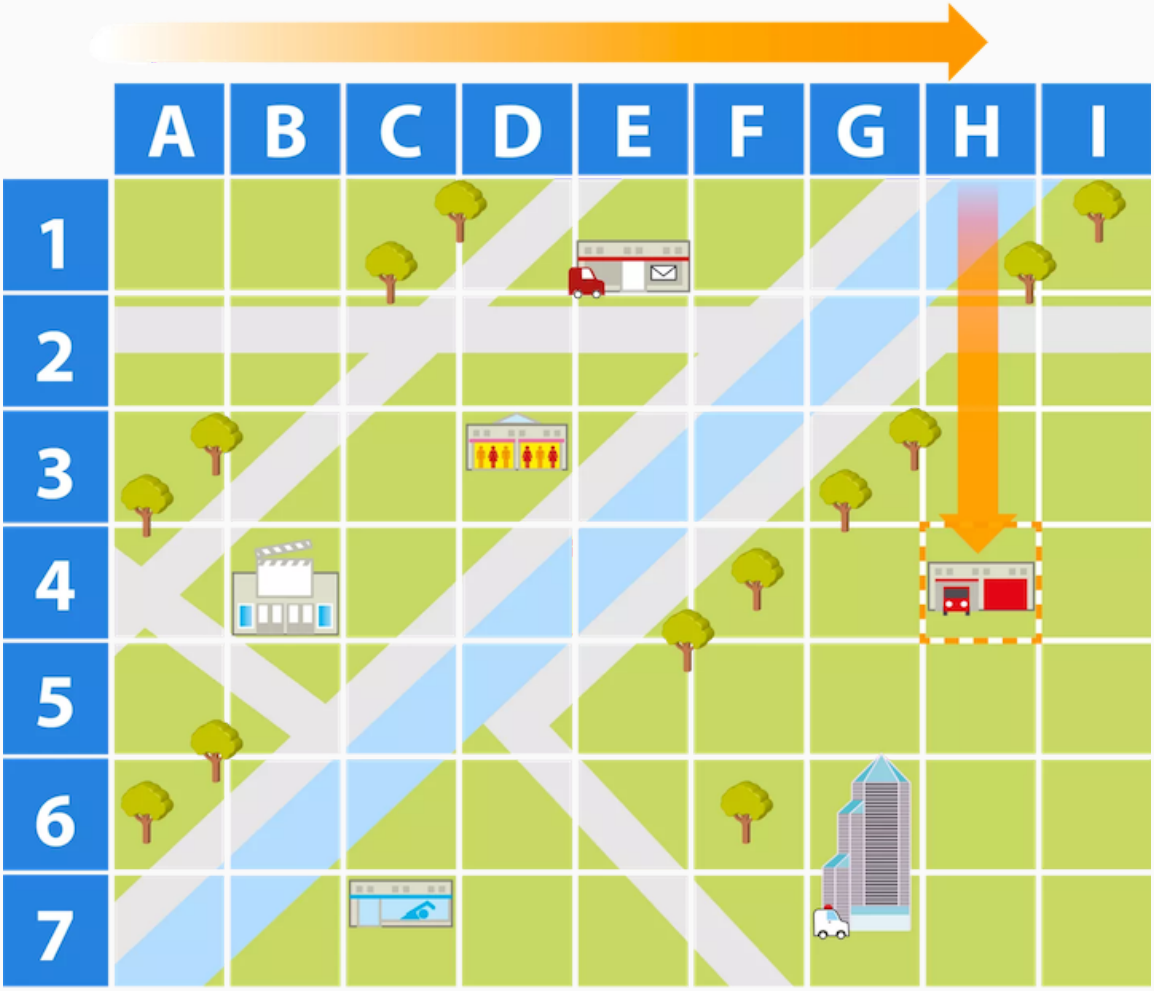
This is a bit hard to work with. So on lines 6 and 23, we've used this line of code `print(f"{row1}\n{row2}\n{row3}"` to format the 3 lists to be printed as a 3 by 3 square, each on a new line.

['□', '□', '□']

['□', '□', '□']

['□', '□', '□']

Now it looks a bit more like the coordinates of a real map:

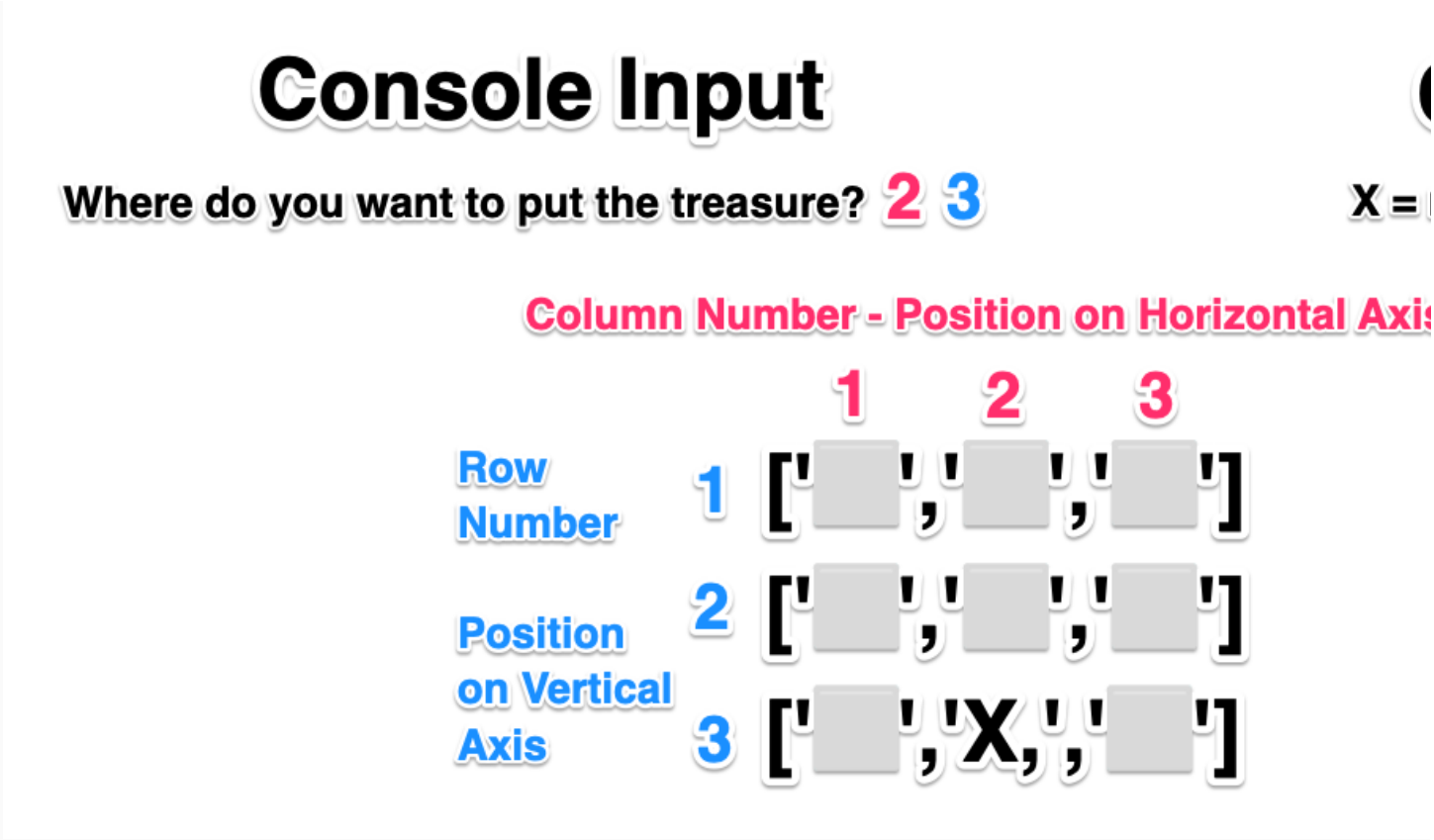


Your job is to write a program that allows you to mark a square on the map using a two-digit system.

The **first digit** in the input will specify the **column** (the position on the horizontal axis).

The **second digit** in the input will specify the **row** number (the position on the vertical axis).

So an input of 23 should place an X at the position shown below:



First, your program must take the user input and convert it to a usable format.

Next, you need to use that input to update your nested list with an "x". Remember that your nested list `map` actually looks like this: [['', '', ''],['', '', ''],['', '', '']].

Example Input 1

column 2, row 3 would be entered as:

```
23
```

Example Output 1

```
['', '', '']
['', '', '']
['', 'X', '']
```

Example Input 2

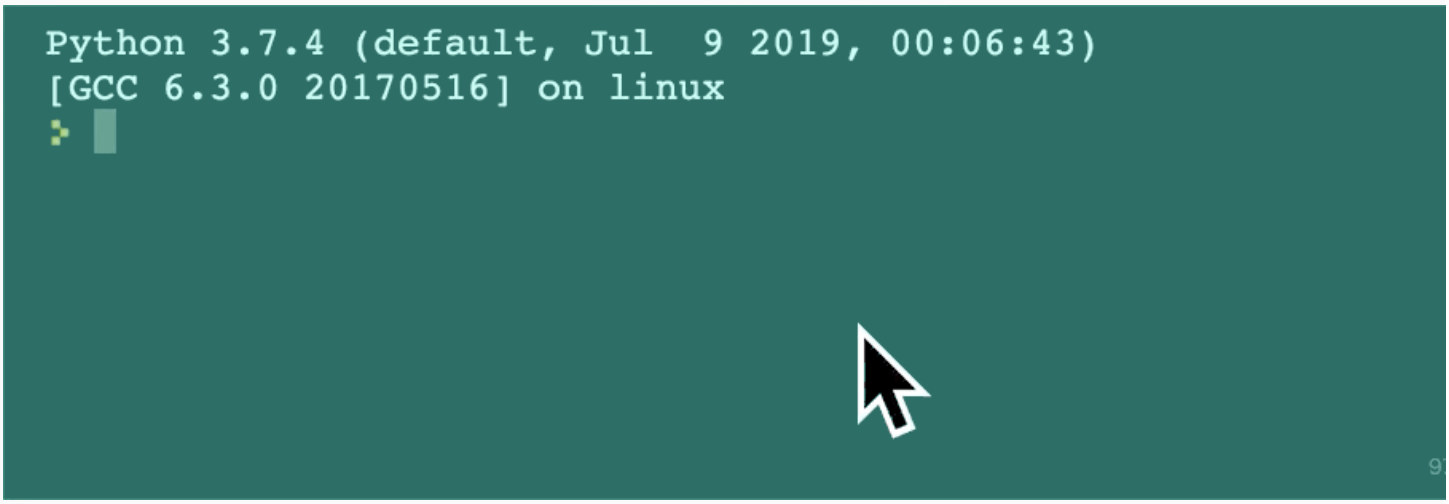
column 3, row 1 would be entered as:

```
31
```

Example Output 2

```
['■', '■', 'X']
['■', '■', '■']
['■', '■', '■']
```

e.g. When you hit **run**, this is what should happen:



Hint

1. Remember that Lists start at index 0!
2. `map` is just a variable that contains a nested list. It's not related to the map function in Python.
3. Remember that nested lists are accessed from out to in. So if `list=[[A,B,C],[E,F,G]]` then `E = list[1][0]`
4. Check that you haven't accidentally added extra spaces and the X is a capital X with a single quote around it.

Correctly formatted:

```
['■', '■', '■']
['■', '■', '■']
['■', 'X', '■']
```

vs.

Incorrectly formatted (missing a space before 'X and extra space after the X and extra space before the comma):

```
['■', '■', '■']
['■', '■', '■']
['■','X ' , '■']
```

Test Your Code

Check your code is doing what it is supposed to. When you're happy with your code, click submit to check your solution.

Solution

https://repl.it/@appbrewery/day-4-3-solution

OPEN ASSIGNMENT WORKSPACE