

## Lab 6 Lists Deep-dive

### Instructions

1. Answer the below question in the boxes if needed.
2. Code on your computer and zip all your code before submission.
3. Please submit the assignment through TalentLabs Learning System.



## Part 1 Coding Exercise

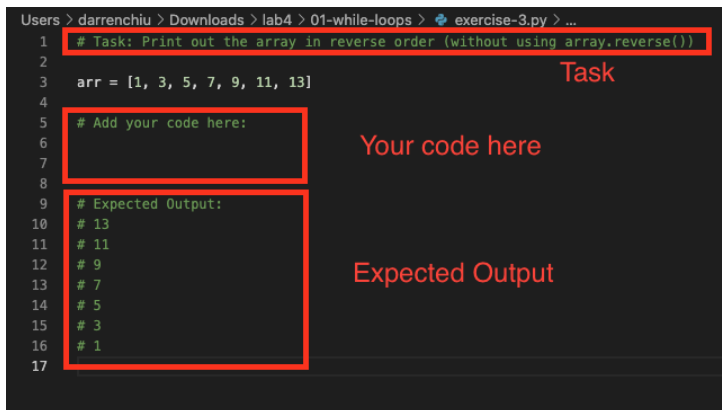
Open the code folder with Visual Studio Code.

You are required to complete or create some functions to fulfil the tasks. Please read the instructions carefully and finish all the tasks.

Make sure you test your code before submission. If you are not sure how to run the code, please check the steps in the previous labs.

Each of the exercise file is composed of the following parts:

1. Task - exercise specifications
2. Your code here - the place where you write your code
3. Test case - a piece of code for you to run and test your function
4. Expected output - if your code is successful, the console should output with this results



```
Users > darrenchiu > Downloads > lab4 > 01-while-loops > exercise-3.py > ...
1  # Task: Print out the array in reverse order (without using array.reverse())
2
3  arr = [1, 3, 5, 7, 9, 11, 13]
4
5  # Add your code here:
6
7
8
9
10 # Expected Output:
11 # 13
12 # 11
13 # 9
14 # 7
15 # 5
16 # 3
17 # 1
```

The screenshot shows a code editor with a dark background. The file path at the top is "Users > darrenchiu > Downloads > lab4 > 01-while-loops > exercise-3.py > ...". The code is as follows:

```
1  # Task: Print out the array in reverse order (without using array.reverse())
2
3  arr = [1, 3, 5, 7, 9, 11, 13]
4
5  # Add your code here:
6
7
8
9
10 # Expected Output:
11 # 13
12 # 11
13 # 9
14 # 7
15 # 5
16 # 3
17 # 1
```

Three sections are highlighted with red boxes:

- Task:** Line 1, "# Task: Print out the array in reverse order (without using array.reverse())".
- Your code here:** Lines 5-8, "# Add your code here:".
- Expected Output:** Lines 10-17, "# Expected Output:" followed by the list of numbers in reverse order.

### 1.1 Array Exercises (01-array-exercises)

In this exercise, you are going to combine your knowledge of lists with some of the new lists methods from Python in achieving some tasks. Make sure you know how to read and use the lists methods documentation.

### 1.2 Array Filter Exercises (02-array-filter-exercises)

In this exercise, you will need to combine if/else statements with loops. Make sure you remember what those are before you start this exercise.