Part 2: Instructions

You can use any Python IDE of your choosing (e.g. VSCode, Jupyter Notebook, PyCharm, etc.). The free online version is https://www.online-python.com.

You are given 20 minutes to complete at least 1 coding problem. You can choose whichever is easier to be done. If you still have time, feel free to work on the other coding problem for bonus points! :)

You can copy and paste the code block for the coding question you choose into the Python IDE. I/O stream handling has been provided. Therefore, you can just focus to write the logic into the user-defined functions, namely, `solution()` accordingly.

Coding Problem 1

Given a string `input_str`, reverse the characters in each word individually, keeping the original spacing and the sequence of words intact. Your task is to write the logic in the user-defined function `solution()`.

- **Example 1:**
  - **Input:** `input_str` = "Jane Doe 123."
  - **Output:** "enaJ eoD .321"
- **Example 2:**
  - **Input:** `input_str` = "I like apple."
  - **Output:** "I ekil .elppa"

```
def solution(input_str):
    # Write your logic here

input_string = str(input('Type your input string: '))
output_string = solution(input_string)
print(f'\nThe output string is: {output_string}\n')
```

Coding Problem 2

Given an array of integers, `nums`, and an integer `target`, your task is to find the indices of two distinct numbers in the array that sum up to the `target` value. Your task is to write the logic in the user-defined function `solution()`.

Assume that there is exactly one unique solution for each input, and you cannot use the same element twice. The solution may be returned in any order.

- **Example 1**
  - **Input:** `nums = [2, 3, 13, 17]`, `target = 5`
  - **Output:** `[0, 1]`
  - **Explanation:** The elements at indices 0 and 1 sum up to 5 (`nums[0] + nums[1] = 5`), so `[0, 1]` is returned.
- **Example 2**
  - **Input:** `nums = [7, 1, 5]`, `target = 6`
  - **Output:** `[1, 2]`

- **Explanation:** The elements at indices 1 and 2 sum up to 6 (`nums[1] + nums[2] = 6`), so `[1, 2]` is returned.

- **Example 3**
  - **Input:** `nums = [3, 3]` , `target = 6`
  - **Output:** `[0, 1]`
  - **Explanation:** The elements at indices 0 and 1 both equal 3, summing to 6 (`nums[0] + nums[1] = 6`), so `[0, 1]` is returned.

```
def solution(nums, target):
    # Write your logic here


nums = str(input('Enter your list of nums: '))
start, end = 1 if nums[0]=='[' else 0, int(len(nums))-2 if nums[-1]==']' else
int(len(nums))-1
if nums[end]==',':
    end -= 1
nums = [int(num) for num in nums[start:end+1].split(',')]
target = int(input('Enter your target: '))
output = solution(nums, target)
print(f'\nThe indices are {sorted(output)}\n')
```