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main.py

Share | Run

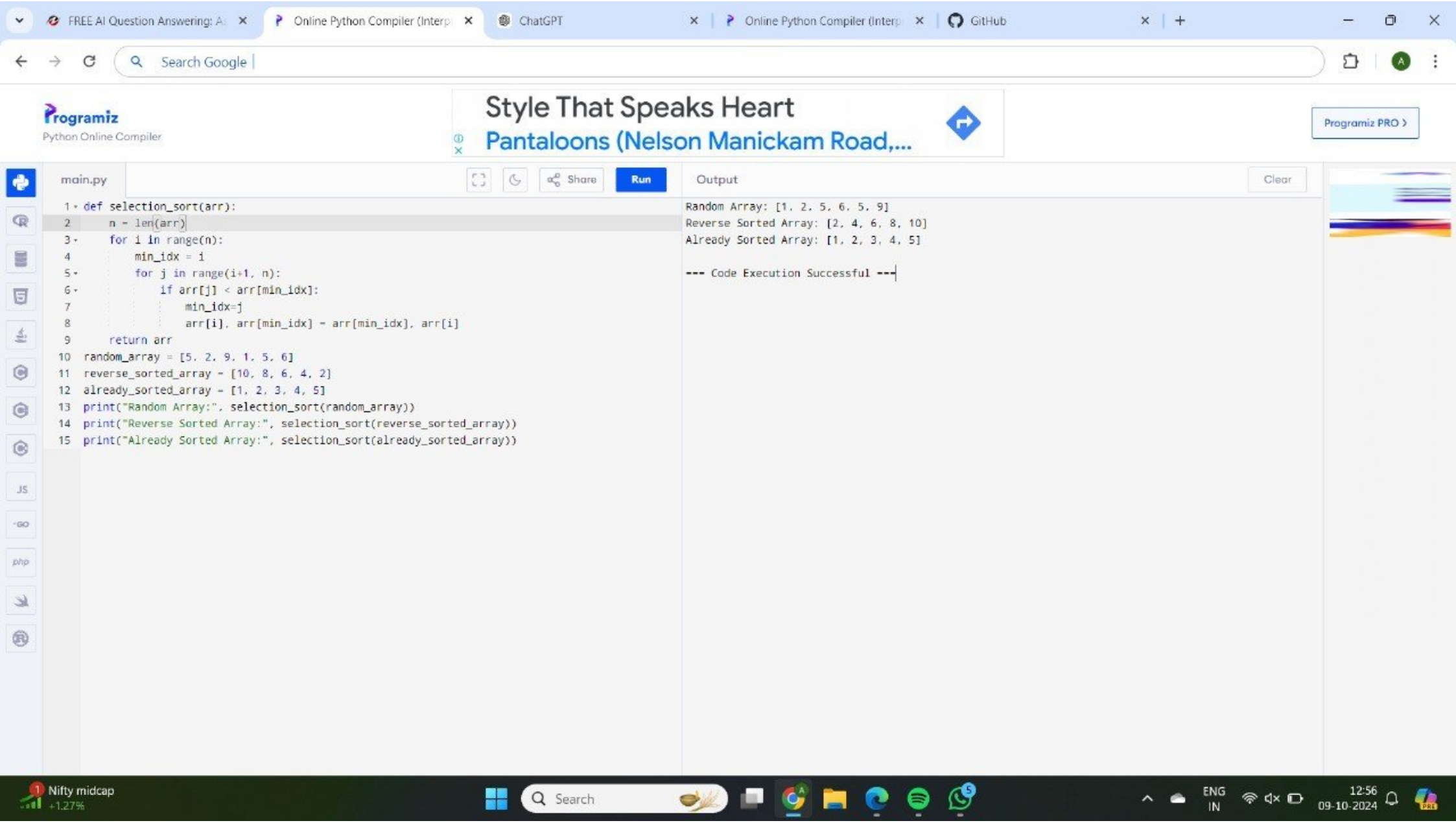
```
def process_list(input_list):
    if input_list:
        return sorted(input_list)
    return input_list
test_cases = [
    ([], []),
    ([1], [1]),
    ([7,7,7,7], [7,7,7,7]),
    ([-5, -1, -3, -2, -4], [-5, -4, -3, -2, -1])
]
for input_data, expected_output in test_cases:
    result = process_list(input_data)
    print(f"Input: {input_data} | Output: {result} | Expected: {expected_output}")

```

Output | Clear

```
Input: [] | Output: [] | Expected: []
Input: [1] | Output: [1] | Expected: [1]
Input: [7, 7, 7, 7] | Output: [7, 7, 7, 7] | Expected: [7, 7, 7, 7]
Input: [-5, -1, -3, -2, -4] | Output: [-5, -4, -3, -2, -1] | Expected: [-5, -4, -3, -2, -1]

--- Code Execution Successful ---
```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main.py
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Output
Clear
def selection_sort(arr):
n = len(arr)
for i in range(n):
min_idx = i
for j in range(i+1, n):
if arr[j] < arr[min_idx]:
min_idx=j
arr[i], arr[min_idx] = arr[min_idx], arr[i]
return arr
random_array = [5, 2, 9, 1, 5, 6]
reverse_sorted_array = [10, 8, 6, 4, 2]
already_sorted_array = [1, 2, 3, 4, 5]
print("Random Array:", selection_sort(random_array))
print("Reverse Sorted Array:", selection_sort(reverse_sorted_array))
print("Already Sorted Array:", selection_sort(already_sorted_array))
Random Array: [1, 2, 5, 6, 5, 9]
Reverse Sorted Array: [2, 4, 6, 8, 10]
Already Sorted Array: [1, 2, 3, 4, 5]
--- Code Execution Successful ---
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```
1 def bubble_sort(arr):
2     n=len(arr)
3     for i in range(n):
4         for j in range(0,n-i-1):
5             if arr[j]>arr[j+1]:
6                 arr[j],arr[j+1]=arr[j+1],arr[j]
7 arr=[2,4,6,7,3]
8 bubble_sort(arr)
9 print("sorted array is :",arr)
```

```
sorted array is : [2, 3, 4, 6, 7]

--- Code Execution Successful ---
```

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main.py

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```python
def optimized_sort(arr):
    arr.sort()
    return arr
test_cases = [
    ([64, 25, 12, 22, 11], [11, 12, 22, 25, 64]),
    ([29, 10, 14, 37, 13], [10, 13, 14, 29, 37]),
    ([3, 5, 2, 1, 4], [1, 2, 3, 4, 5]),
    ([1, 2, 3, 4, 5], [1, 2, 3, 4, 5]),
    ([5, 4, 3, 2, 1], [1, 2, 3, 4, 5])
]
for i, (input_list, expected_output) in enumerate(test_cases):
    result = optimized_sort(input_list[:])
    print(f"Test Case {i+1}: {'Passed' if result == expected_output else 'Failed'}")
    print(f"Output: {result}, Expected: {expected_output}\n")
```

Output | Clear

```
Test Case 1: Passed
Output: [11, 12, 22, 25, 64], Expected: [11, 12, 22, 25, 64]

Test Case 2: Passed
Output: [10, 13, 14, 29, 37], Expected: [10, 13, 14, 29, 37]

Test Case 3: Passed
Output: [1, 2, 3, 4, 5], Expected: [1, 2, 3, 4, 5]

Test Case 4: Passed
Output: [1, 2, 3, 4, 5], Expected: [1, 2, 3, 4, 5]

Test Case 5: Passed
Output: [1, 2, 3, 4, 5], Expected: [1, 2, 3, 4, 5]


--- Code Execution Successful ---
```

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main.py

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```python
def insertion_sort(arr):
    for i in range(1, len(arr)):
        key = arr[i]
        j = i - 1
        while j >= 0 and arr[j] > key:
            arr[j + 1] = arr[j]
            j -= 1
        arr[j + 1] = key
    return arr
print(insertion_sort([3, 1, 4, 1, 5, 9, 2, 6, 5, 3]))
```

```
[1, 1, 2, 3, 3, 4, 5, 5, 6, 9]

--- Code Execution Successful ---
```

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```python
def findKthPositive(arr, k):
    missingvalue = 0
    current = 1
    index = 0
    while missingvalue < k:
        if index < len(arr) and arr[index] == current:
            index += 1
        else:
            missingvalue += 1
            if missingvalue == k:
                return current
        current += 1
print(findKthPositive([2, 3, 4, 7, 11], 5))
```

Output | Clear

```
9

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```

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main.py

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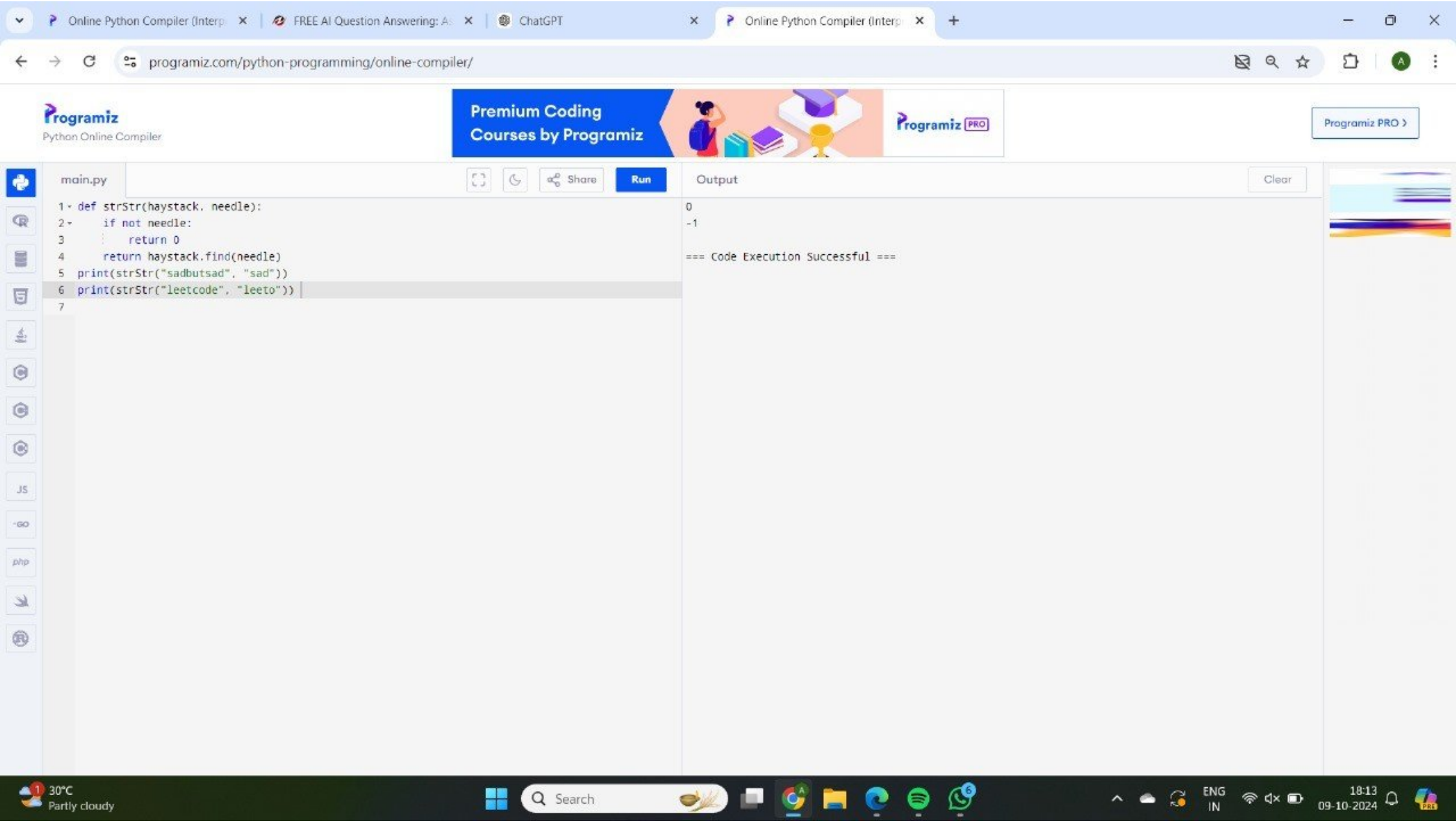
```python
def find_peak_element(nums):
    left, right = 0, len(nums) - 1
    while left < right:
        mid = (left + right) // 2
        if nums[mid] > nums[mid + 1]:
            right = mid
        else:
            left = mid + 1
    return left
print(find_peak_element([1, 2,7,8,3, 1]))
```

Output | Clear

```
3

--- Code Execution Successful ---
```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main.py
Share
Run
Output
Clear
def strStr(haystack, needle):
if not needle:
return 0
return haystack.find(needle)
print(strStr("sadbutsad", "sad"))
print(strStr("leetcode", "leeto"))
0
-1
=== Code Execution Successful ===
30°C
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main.py

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```python
def find_substrings(words):
    result = []
    for i in range(len(words)):
        for j in range(len(words)):
            if i != j and words[i] in words[j]:
                result.append(words[i])
                break
    return result
words1 = ["mass", "as", "hero", "superhero"]
print(find_substrings(words1))
```

Output | Clear

```
['as', 'hero']

--- Code Execution Successful ---
```