

Started on	Monday, 14 July 2025, 1:25 PM
State	Finished
Completed on	Monday, 14 July 2025, 3:44 PM
Time taken	2 hours 19 mins
Overdue	19 mins 6 secs
Grade	80.00 out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

Write a Python Program Using a recursive function to calculate the sum of a sequence

For example:

Input	Result
20	210
36	666
45	1035

Answer: (penalty regime: 0 %)

```

1 def recursive_sum(n):
2     if n==1:
3         return 1
4     return n+recursive_sum(n-1)
5 print(recursive_sum(int(input())))
```

	Input	Expected	Got	
✓	20	210	210	✓
✓	36	666	666	✓
✓	45	1035	1035	✓
✓	58	1711	1711	✓
✓	65	2145	2145	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.

Question 2

Incorrect

Mark 0.00 out of 20.00

Write a python program to implement quick sort on the given float array values.

For example:

Input	Result
5	left: []
6.9	right: []
8.3	left: []
2.1	right: []
1.5	left: [1.5]
6.4	right: [6.4]
	left: []
	right: []
	left: [1.5, 2.1, 6.4]
	right: [8.3]
	[1.5, 2.1, 6.4, 6.9, 8.3]
6	left: []
3.1	right: []
2.4	left: []
5.6	right: []
4.3	left: []
6.2	right: []
7.8	left: []
	right: [7.8]
	left: [4.3]
	right: [6.2, 7.8]
	left: [2.4]
	right: [4.3, 5.6, 6.2, 7.8]
	[2.4, 3.1, 4.3, 5.6, 6.2, 7.8]

Answer: (penalty regime: 0 %)

```

1 def quick_sort(arr):
2     if len(arr) <= 1:
3         return arr
4     pivot = arr[0]
5     left = [x for x in arr[1:] if x <= pivot]
6     right = [x for x in arr[1:] if x > pivot]
7     print("left: ", left)
8     print("right: ", right)
9     return quick_sort(left) + [pivot] + quick_sort(right)
10
11 n = int(input())
12 arr = []
13 for i in range(n):
14     arr.append(float(input()))
15 print(quick_sort(arr))

```

	Input	Expected	Got	
✗	5	left: []	left: [2.1, 1.5, 6.4]	✗
	6.9	right: []	right: [8.3]	
	8.3	left: []	left: [1.5]	
	2.1	right: []	right: [6.4]	
	1.5	left: [1.5]	[1.5, 2.1, 6.4, 6.9, 8.3]	
	6.4	right: [6.4]		
		left: []		
		right: []		
		left: [1.5, 2.1, 6.4]		
		right: [8.3]		
		[1.5, 2.1, 6.4, 6.9, 8.3]		

Some hidden test cases failed, too.

Your code must pass all tests to earn any marks. Try again.

[Show differences](#)

Incorrect

Marks for this submission: 0.00/20.00.

Question 3

Correct

Mark 20.00 out of 20.00

Write a python program to implement merge sort without using recursive function on the given list of values.

For example:

Input	Result
7	left: [33]
33	Right: [42]
42	left: [9]
9	Right: [37]
37	left: [8]
8	Right: [47]
47	left: [5]
5	Right: []
	left: [33, 42]
	Right: [9, 37]
	left: [8, 47]
	Right: [5]
	left: [9, 33, 37, 42]
	Right: [5, 8, 47]
	[5, 8, 9, 33, 37, 42, 47]
6	left: [10]
10	Right: [3]
3	left: [5]
5	Right: [61]
61	left: [74]
74	Right: [92]
92	left: [3, 10]
	Right: [5, 61]
	left: [74, 92]
	Right: []
	left: [3, 5, 10, 61]
	Right: [74, 92]
	[3, 5, 10, 61, 74, 92]

Answer: (penalty regime: 0 %)

```

1 def merge(left, right):
2     result = []
3     while left and right:
4         if left[0] <= right[0]:
5             result.append(left.pop(0))
6         else:
7             result.append(right.pop(0))
8     result += left
9     result += right
10    return result
11
12    n = int(input())
13    arr = []
14    for i in range(n):
15        arr.append(int(input()))
16
17    lists = [[x] for x in arr]
18    while len(lists) > 1:
19        if len(lists) % 2 != 0:
20            lists.append([])
21        merged_lists = []
22        for i in range(0, len(lists), 2):

```

	Input	Expected	Got	
✓	7 33 42 9 37 8 47 5	left: [33] Right: [42] left: [9] Right: [37] left: [8] Right: [47] left: [5] Right: [] left: [33, 42] Right: [9, 37] left: [8, 47] Right: [5] left: [9, 33, 37, 42] Right: [5, 8, 47] [5, 8, 9, 33, 37, 42, 47]	left: [33] Right: [42] left: [9] Right: [37] left: [8] Right: [47] left: [5] Right: [] left: [33, 42] Right: [9, 37] left: [8, 47] Right: [5] left: [9, 33, 37, 42] Right: [5, 8, 47] [5, 8, 9, 33, 37, 42, 47]	✓
✓	6 10 3 5 61 74 92	left: [10] Right: [3] left: [5] Right: [61] left: [74] Right: [92] left: [3, 10] Right: [5, 61] left: [74, 92] Right: [] left: [3, 5, 10, 61] Right: [74, 92] [3, 5, 10, 61, 74, 92]	left: [10] Right: [3] left: [5] Right: [61] left: [74] Right: [92] left: [3, 10] Right: [5, 61] left: [74, 92] Right: [] left: [3, 5, 10, 61] Right: [74, 92] [3, 5, 10, 61, 74, 92]	✓
✓	5 4 12 6 98 3	left: [4] Right: [12] left: [6] Right: [98] left: [3] Right: [] left: [4, 12] Right: [6, 98] left: [3] Right: [] left: [4, 6, 12, 98] Right: [3] [3, 4, 6, 12, 98]	left: [4] Right: [12] left: [6] Right: [98] left: [3] Right: [] left: [4, 12] Right: [6, 98] left: [3] Right: [] left: [4, 6, 12, 98] Right: [3] [3, 4, 6, 12, 98]	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Write a python program for a search function with parameter list name and the value to be searched on the given list of int values.

For example:

Test	Input	Result
search(List, n)	5	Found
	3	
	4	
	5	
	6	
	7	
	4	
search(List, n)	6	Found
	20	
	34	
	56	
	87	
	96	
	51	
	87	

Answer: (penalty regime: 0 %)

```

1 def search(List,n):
2     if n in List:
3         print("Found")
4     else:
5         print("Not Found")
6 List=[]
7 size=int(input())
8 for i in range(size):
9     List.append(int(input()))
10 n=int(input())

```

	Test	Input	Expected	Got	
✓	search(List, n)	5	Found	Found	✓
		3			
		4			
		5			
		6			
		7			
		4			
✓	search(List, n)	6	Found	Found	✓
		20			
		34			
		56			
		87			
		96			
		51			
		87			

	Test	Input	Expected	Got	
✓	search(List, n)	4 30 10 20 50 60	Not Found	Not Found	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.

Question 5

Correct

Mark 20.00 out of 20.00

Write a python program for a search function with parameter list name and the value to be searched on the given list of float values.

For example:

Test	Input	Result
search(List, n)	5	3.2 Found
	3.2	
	6.1	
	4.5	
	6.2	
	8.5	
	3.2	
search(List, n)	4	6.1 Not Found
	3.2	
	1.5	
	6.4	
	7.8	
	6.1	

Answer: (penalty regime: 0 %)

```

1 def search(List,n):
2     if n in List:
3         print(n,"Found")
4     else:
5         print(n,"Not Found")
6 List=[]
7 size=int(input())
8 for i in range(size):
9     List.append(float(input()))
10 n=float(input())

```

	Test	Input	Expected	Got	
✓	search(List, n)	5 3.2 6.1 4.5 6.2 8.5 3.2	3.2 Found	3.2 Found	✓
✓	search(List, n)	4 3.2 1.5 6.4 7.8 6.1	6.1 Not Found	6.1 Not Found	✓
✓	search(List, n)	7 2.1 3.2 6.5 4.1 5.2 7.1 8.2 9.3	9.3 Not Found	9.3 Not Found	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.