

Started on Wednesday, 23 April 2025, 3:25 PM**State** Finished**Completed on** Wednesday, 23 April 2025, 4:02 PM**Time taken** 37 mins 12 secs**Grade** 80.00 out of 100.00Question **1**

Not answered

Mark 0.00 out of 20.00

Write a python program to implement merge sort using iterative approach on the given list of float values.

For example:

Test	Input	Result
Merge_Sort(S)	5 10.2 21.3 3.5 7.8 9.8	The Original array is: [10.2, 21.3, 3.5, 7.8, 9.8] Array after sorting is: [3.5, 7.8, 9.8, 10.2, 21.3]
Merge_Sort(S)	6 20.3 41.2 5.3 6.2 8.1 65.2	The Original array is: [20.3, 41.2, 5.3, 6.2, 8.1, 65.2] Array after sorting is: [5.3, 6.2, 8.1, 20.3, 41.2, 65.2]

Answer: (penalty regime: 0 %)

1 ||

Question **2**

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     for i in range(len(List)):
3         if List[i]==n:
4             return 1
5     else:
6         return 0
7
8
9
10
11
12 List=[]
13 x=int(input())
14 for i in range(x):
15     ele=float(input())
16     List.append(ele)
17 n=float(input())
18 ans=search(List,n)
19 if ans==1:
20     print(n,"Found")
21 else:
22     print(n,"Not Found")

```

	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! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 3

Correct

Mark 20.00 out of 20.00

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

For example:

Input	Result
5 6.9 8.3 2.1 1.5 6.4	left: [] right: [] left: [] right: [] left: [1.5] 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 3.1 2.4 5.6 4.3 6.2 7.8	left: [] right: [] left: [] right: [] left: [] right: [] 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 qsort(arr):
2     if arr==[]:
3         return []
4     pivot=arr[0:1]
5     left=qsort([x for x in arr[1:] if x<arr[0]])
6     right=qsort([x for x in arr[1:] if x>=arr[0]])
7     print("left: ",left)
8     print("right: ",right)
9     return left+pivot+right
10
11 arr=[]
12 n=int(input())
13 for i in range(n):
14     ele=float(input())
15     arr.append(ele)
16 print(qsort(arr))
17
18

```

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

	Input	Expected	Got	
✓	6 3.1 2.4 5.6 4.3 6.2 7.8	left: [] right: [] left: [] right: [] left: [] right: [] 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]	left: [] right: [] left: [] right: [] left: [] right: [] 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]	✓
✓	8 1.2 1.3 4.2 5.3 6.4 7.3 6.8 9.2	left: [] right: [] left: [] right: [] left: [6.8] right: [9.2] left: [] right: [6.8, 7.3, 9.2] left: [] right: [6.4, 6.8, 7.3, 9.2] left: [] right: [5.3, 6.4, 6.8, 7.3, 9.2] left: [] right: [4.2, 5.3, 6.4, 6.8, 7.3, 9.2] left: [] right: [1.3, 4.2, 5.3, 6.4, 6.8, 7.3, 9.2] [1.2, 1.3, 4.2, 5.3, 6.4, 6.8, 7.3, 9.2]	left: [] right: [] left: [] right: [] left: [6.8] right: [9.2] left: [] right: [6.8, 7.3, 9.2] left: [] right: [6.4, 6.8, 7.3, 9.2] left: [] right: [5.3, 6.4, 6.8, 7.3, 9.2] left: [] right: [4.2, 5.3, 6.4, 6.8, 7.3, 9.2] left: [] right: [1.3, 4.2, 5.3, 6.4, 6.8, 7.3, 9.2] [1.2, 1.3, 4.2, 5.3, 6.4, 6.8, 7.3, 9.2]	✓

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 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 edho(n):  
2     if n==1:  
3         return 1  
4     else:  
5         return n+edho(n-1)  
6  
7 n=int(input())  
8 ans=edho(n)  
9 print(ans)
```

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

Passed all tests! ✓

Correct

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 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     for i in range(len(List)):
3         if List[i]==n:
4             return 1
5     else:
6         return 0
7 List=[]
8 x=int(input())
9 for i in range(x):
10     ele=float(input())
11     List.append(ele)
12 n=float(input())
13 ans=search(List,n)
14 if ans==1:
15     print("Found")
16 else:
17     print("Not Found")

```

	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! ✓

Correct

Marks for this submission: 20.00/20.00.