
Started on Tuesday, 18 March 2025, 3:16 PM

State Finished

Completed on Tuesday, 18 March 2025, 3:38 PM

Time taken 22 mins 12 secs

Grade 80.00 out of 100.00

Question 1

Correct

Mark 20.00 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 %)

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```
def Merge_Sort(S):
    if len(S)>1:
        mid=len(S)//2
        left_half=S[:mid]
        right_half=S[mid:]
        Merge_Sort(left_half)
        Merge_Sort(right_half)
        i=j=k=0
        while i<len(left_half) and j<len(right_half):
            if left_half[i]<right_half[j]:
                S[k]=left_half[i]
                i+=1
            else:
                S[k]=right_half[j]
                j+=1
            k+=1
        while i<len(left_half):
            S[k]=left_half[i]
```

	Test	Input	Expected	Got	
✓	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]	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]	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]	✓

	Test	Input	Expected	Got	
✓	Merge_Sort(S)	4 2.3 6.1 4.5 96.5	The Original array is: [2.3, 6.1, 4.5, 96.5] Array after sorting is: [2.3, 4.5, 6.1, 96.5]	The Original array is: [2.3, 6.1, 4.5, 96.5] Array after sorting is: [2.3, 4.5, 6.1, 96.5]	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 2

Incorrect

Mark 0.00 out of 20.00

Write a python program to implement the quick sort using recursion on the given list of float values.

For example:

Input	Result
5	pivot: 9.7
6.3	pivot: 5.8
1.2	pivot: 4.6
4.6	[1.2, 4.6, 5.8, 6.3, 9.7]
5.8	
9.7	
6	pivot: 5.4
2.3	pivot: 3.6
7.8	pivot: 7.8
9.5	[2.3, 3.6, 4.2, 5.4, 7.8, 9.5]
4.2	
3.6	
5.4	

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
def Merge_Sort(S):
    if len(S)>1:
        mid=len(S)//2
        left_half=S[:mid]
        right_half=S[mid:]
        Merge_Sort(left_half)
        Merge_Sort(right_half)
        i=j=k=0
        while i<len(left_half) and j<len(right_half):
            if left_half[i]<right_half[j]:
                S[k]=left_half[i]
                i+=1
            else:
                S[k]=right_half[j]
                j+=1
            k+=1
        while i<len(left_half):
            S[k]=left_half[i]
```

	Input	Expected	Got	
✗	5 6.3 1.2 4.6 5.8 9.7	pivot: 9.7 pivot: 5.8 pivot: 4.6 [1.2, 4.6, 5.8, 6.3, 9.7]	The Original array is: [6.3, 1.2, 4.6, 5.8, 9.7] Array after sorting is: [1.2, 4.6, 5.8, 6.3, 9.7]	✗

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 linear search on the given tuple of string values.

note: As the tuple is immutable convert the list to tuple to perform search

For example:

Input	Result
5 ram john akbar seetha oviya john	Tuple: john found
4 rohini fathima jenifer nizam rakesh	Tuple: rakesh not found

Answer: (penalty regime: 0 %)

```

1 def search(list,n):
2     for i in list:
3         if i==n:
4             print(f"Tuple: {n} found")
5             return
6     print(f"Tuple: {n} not found")
7 a=int(input())
8 List=[]
9 for i in range(a):
10     List.append(input())
11 n=input()
12 search(List,n)
13
14
15

```

	Input	Expected	Got	
✓	5 ram john akbar seetha oviya john	Tuple: john found	Tuple: john found	✓
✓	4 rohini fathima jenifer nizam rakesh	Tuple: rakesh not found	Tuple: rakesh not found	✓

	Input	Expected	Got	
✓	6 rose jasmine tulips marigold hibiscus lotus lilly	Tuple: lilly not found	Tuple: lilly not found	✓

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 to implement linear search on the given tuple of float values.

note: As the tuple is immutable convert the list to tuple to perform search

For example:

Input	Result
5 3.2 1.5 6.4 7.8 9.5 6.4	Tuple: 6.4 found
6 3.2 1.2 3.4 5.3 6.2 6.8 6.2	Tuple: 6.2 found

Answer: (penalty regime: 0 %)

```

1 def search(list,n):
2     for i in list:
3         if i==n:
4             print(f"Tuple: {n} found")
5             return
6     print(f"Tuple: {n} not found")
7 a=int(input())
8 List=[]
9 for i in range(a):
10     List.append(float(input()))
11 n=float(input())
12 search(List,n)
13

```

	Input	Expected	Got	
✓	5 3.2 1.5 6.4 7.8 9.5 6.4	Tuple: 6.4 found	Tuple: 6.4 found	✓

	Input	Expected	Got	
✓	6 3.2 1.2 3.4 5.3 6.2 6.8 6.2	Tuple: 6.2 found	Tuple: 6.2 found	✓
✓	4 2.1 3.2 6.5 4.5 3.5	Tuple: 3.5 not found	Tuple: 3.5 not found	✓

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 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 res(n):
2     if n<=0:
3         return 0
4     else:
5         return n+res(n-1)
6 a=int(input())
7 print(res(a))

```

	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.