

Started on	Friday, 14 March 2025, 1:20 PM
State	Finished
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Time taken	1 hour 14 mins
Grade	80.00 out of 100.00

Question 1

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

```

	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]	✓
✓	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 **2**

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 %)

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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             return
5     return -1
6
7 List = []
8 x=int(input())
9 for i in range(x):
10     List.append(input())
11 n =input()
12 res=search(List,n)
13 if res!=-1:
14     print(f"Tuple: {n} found")
15 else:
16     print(f"Tuple: {n} not found")

```

	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! ✓



Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Write a Python Program to print factorial of a number recursively.

For example:

Input	Result
5	Factorial of number 5 = 120
6	Factorial of number 6 = 720

Answer: (penalty regime: 0 %)

```

1 def fact(n):
2     if n<=1:
3         return n
4     return n*fact(n-1)
5 n=int(input())
6 print("Factorial of number",n,"=",fact(n))

```

	Input	Expected	Got	
✓	5	Factorial of number 5 = 120	Factorial of number 5 = 120	✓
✓	6	Factorial of number 6 = 720	Factorial of number 6 = 720	✓
✓	7	Factorial of number 7 = 5040	Factorial of number 7 = 5040	✓
✓	8	Factorial of number 8 = 40320	Factorial of number 8 = 40320	✓

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 List:
3          if i == n :
4              print("Found")
5              break
6      else :
7          print("Not Found")
8
9  List = []
10 x=int(input())
11 for i in range(x):
12     List.append(input())
13 n =input()

```

	Test	Input	Expected	Got	
✓	search(List, n)	5	Found	Found	✓
		3			
		4			
		5			
		6			
		7			
		4			

	Test	Input	Expected	Got	
✓	search(List, n)	6 20 34 56 87 96 51 87	Found	Found	✓
✓	search(List, n)	4 30 10 20 50 60	Not Found	Not Found	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.