Started on	Friday, 11 April 2025, 3:09 PM
State	Finished
Completed on	Friday, 11 April 2025, 3:34 PM
Time taken	24 mins 41 secs
Grade	**80.00** out of 100.00

Question **1**

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

Answer: (penalty regime: 0 %)

```
global key
def search(List,n):
    for i in range(0,n):
        if List[i]==key:
            return i
    return -1
List=[]
n=int(input())
for i in range(0,n):
    ele=float(input())
    List.append(ele)
key=float(input())
res=search(List,n)
if(res==-1):
    print(f"{key} Not Found")
else:
    print(f"{key} 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	✔

	Test	Input	Expected	Got	
✔	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 **2**

Correct

Mark 20.00 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 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]
6 2.3 7.8 9.5 4.2 3.6 5.4	pivot: 5.4 pivot: 3.6 pivot: 7.8 [2.3, 3.6, 4.2, 5.4, 7.8, 9.5]

Answer: (penalty regime: 0 %)

```
def part(arr,l,r):
    pi=arr[r]
    i=l-1
    for j in range(l,r):
        if arr[j]<=pi:
            i=i+1
            arr[i],arr[j]=arr[j],arr[i]
    arr[i+1],arr[r]=arr[r],arr[i+1]
    return i+1
def quickSort(arr,l,r):
    if l<r:
        p=part(arr,l,r)
        print("pivot: ",arr[p])
        quickSort(arr,l,p-1)
        quickSort(arr,p+1,r)
    return arr
arr=list()
n=int(input())
for i in range(0,n):
    ele=float(input())
    arr.append(ele)
print(quickSort(arr,0,n-1))
```

	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]	pivot: 9.7 pivot: 5.8 pivot: 4.6 [1.2, 4.6, 5.8, 6.3, 9.7]	✔

	Input	Expected	Got	
✔	6 2.3 7.8 9.5 4.2 3.6 5.4	pivot: 5.4 pivot: 3.6 pivot: 7.8 [2.3, 3.6, 4.2, 5.4, 7.8, 9.5]	pivot: 5.4 pivot: 3.6 pivot: 7.8 [2.3, 3.6, 4.2, 5.4, 7.8, 9.5]	✔
✔	4 3.2 6.4 8.7 1.5	pivot: 1.5 pivot: 3.2 pivot: 6.4 [1.5, 3.2, 6.4, 8.7]	pivot: 1.5 pivot: 3.2 pivot: 6.4 [1.5, 3.2, 6.4, 8.7]	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Incorrect

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 %)

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

Syntax Error(s)

```
  File "__tester__.python3", line 30
    print("The Original array is: ",S)
    ^
SyntaxError: invalid syntax
```

Incorrect

Marks for this submission: 0.00/20.00.

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

Answer: (penalty regime: 0 %)

```
global key
def search(List,n):
    for i in range(0,n):
        if List[i]==key:
            return i
    return -1
List=[]
n=int(input())
for i in range(0,n):
    ele=float(input())
    List.append(ele)
key=float(input())
res=search(List,n)
if(res==-1):
    print("Not Found")
else:
    print("Found")
```

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

	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! ✔

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 %)

```
num = int(input())
def recur_sum(n):
   if n <= 1:
       return n
   else:
       return n + recur_sum(n-1)
print(recur_sum(num))
```

	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.