Started on	Thursday, 19 September 2024, 10:04 AM
State	Finished
Completed on	Thursday, 19 September 2024, 10:46 AM
Time taken	41 mins 28 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

Correct

Mark 1.00 out of 1.00

Write a Program to Implement the Quick Sort Algorithm

Input Format:
The first line contains the no of elements in the list-n
The next n lines contain the elements.

Output:
Sorted list of elements

For example:

Input	Result
5 67 34 12 98 78	12 34 67 78 98

Answer:

```c
1  #include <stdio.h>
2  void s(int *a, int *b){
3      int t=*a;
4      *a=*b;
5      *b= t;
6  }
7  int p(int arr[],int l,int h){
8      int x=arr[h],i=(l-1);
9      for (int j =l;j<h;j++) {
10         if(arr[j]<x){
11             i++;
12             s(&arr[i], &arr[j]);
13         }
14     }
15     s(&arr[i + 1], &arr[h]);
16     return (i+1);
17 }
18 void q(int arr[],int l,int h){
19     if (l<h){
20         int pi=p(arr,l,h);
21         q(arr,l,pi-1);
22         q(arr,pi+1,h);
23     }
24 }
25 int main(){
26     int n;
27     scanf("%d", &n);
28     int arr[n];
29     for (int i = 0; i < n; i++){
30         scanf("%d", &arr[i]);
31     }
32     q(arr, 0, n - 1);
33     for (int i = 0; i < n; i++){
34         printf("%d ", arr[i]);
35     }
36     return 0;
37 }
```

	Input	Expected	Got	
✔	5 67 34 12 98 78	12 34 67 78 98	12 34 67 78 98	✔
✔	10 1 56 78 90 32 56 11 10 90 114	1 10 11 32 56 56 78 90 90 114	1 10 11 32 56 56 78 90 90 114	✔
✔	12 9 8 7 6 5 4 3 2 1 10 11 90	1 2 3 4 5 6 7 8 9 10 11 90	1 2 3 4 5 6 7 8 9 10 11 90	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Jump to...