

**Started on** Thursday, 18 September 2025, 9:26 AM

**State** Finished

**Completed on** Friday, 19 September 2025, 9:03 PM

**Time taken** 1 day 11 hours

**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	12 34 67 78 98
67 34 12 98 78	

**Answer:**

```

1 #include<stdio.h>
2 void quicksort(int arr[],int low,int high)
3 {
4     if(low<high)
5     {
6         int pivot=arr[high];
7         int i=low-1;
8         for(int j=low;j<high;j++)
9         {
10             if(arr[j]<pivot)
11             {
12                 i++;
13                 int temp=arr[i];
14                 arr[i]=arr[j];
15                 arr[j]=temp;
16             }
17         }
18         int temp=arr[i+1];
19         arr[i+1]=arr[high];
20         arr[high]=temp;
21         int pi=i+1;
22         quicksort(arr,low,pi-1);
23         quicksort(arr,pi+1,high);
24     }
25 }
26 int main()
27 {
28     int n;
29     scanf("%d",&n);
30     int arr[n];
31     for(int i=0;i<n;i++)
32     {
33         scanf("%d",&arr[i]);
34     }
35     quicksort(arr,0,n-1);
36     for(int i=0;i<n;i++)
37     {
38         printf("%d ",arr[i]);
39     }
40     return 0;
41 }
```

	<b>Input</b>	<b>Expected</b>	<b>Got</b>	
✓	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.