

**Started on** Friday, 19 September 2025, 9:54 PM

**State** Finished

**Completed on** Friday, 19 September 2025, 10:04 PM

**Time taken** 9 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:

```

1  #include<stdio.h>
2  void quicksort(int a[],int l,int h){
3      int i,j,p,temp;
4      if(l<h){
5          i=l+1;
6          p=l;
7          j=h;
8          while(i<=j)
9          {
10             while(i<=h && a[i]<=a[p])
11                 i++;
12             while (a[j]>a[p])
13                 j--;
14             if(i<j)
15             {
16                 temp=a[i];
17                 a[i]=a[j];
18                 a[j]=temp;
19             }
20         }
21         temp=a[p];
22         a[p]=a[j];
23         a[j]=temp;
24         quicksort(a,l,j-1);
25         quicksort(a,j+1,h);
26     }
27 }
28 int main()
29 {
30     int n;
31     scanf("%d",&n);
32     int a[n];
33     for(int i=0;i<n;i++)
34     {
35         scanf("%d",&a[i]);
36     }
37     quicksort(a,0,n-1);
38     for(int i=0;i<n;i++)
39     {
40         printf("%d ",a[i]);
41     }
42 }
```

	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.