Started on	Thursday, 18 September 2025, 9:36 AM
State	Finished
Completed on	Friday, 19 September 2025, 9:13 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 67 34 12 98 78	12 34 67 78 98

Answer:

```c
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 }
```

	Input	Expected	Got	
✔	5 67 34 12 98 78	12 34 67 78 98	12 34 67 78 98	✔

	Input	Expected	Got	
✔	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.