Started on	Friday, 19 September 2025, 9:54 PM
State	Finished
Completed on	Friday, 19 September 2025, 10:15 PM
Time taken	21 mins 7 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
#include<stdio.h>
void quicksort(int a[],int left,int right);
int main()
{
    int n;
    scanf("%d",&n);
    int a[n];
    for(int i=0;i<n;i++)
    scanf("%d",&a[i]);
    quicksort(a,0,n-1);
    for(int i=0;i<n;i++)
    printf("%d ",a[i]);
    return 0;
}
void quicksort(int a[],int left,int right)
{
    int i,j,pivot,temp;
    if(left<right)
    {
        pivot=left;
        i=left;
        j=right;
        while(i<j)
        {
            while(a[i]<=a[pivot] && i<right)
            i++;
            while(a[j]>a[pivot])
            j--;
            if(i<j)
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
        temp=a[pivot];
        a[pivot]=a[j];
        a[j]=temp;
        quicksort(a,left,j-1);
        quicksort(a,j+1,right);
    }
}
```

	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.