5-Implementation of Quick Sort

Started on	Friday, 3 October 2025, 2:40 PM
State	Finished
Completed on	Friday, 3 October 2025, 2:52 PM
Time taken	11 mins 59 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

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>
int partition(int arr[],int low,int high){
    int pivot=arr[high],i=low-1,temp;
    for(int j=low;j<high;j++){
        if(arr[j]<=pivot){
            i++;
            temp=arr[i];arr[i]=arr[j];arr[j]=temp;
        }
    }
    temp=arr[i+1];arr[i+1]=arr[high];arr[high]=temp;
    return  i+1;
}
void quicksort(int arr[],int low,int high){
    if(low<high){
        int pi=partition(arr,low,high);
        quicksort(arr,low,pi-1);
        quicksort(arr,pi+1,high);
    }
}
int main(){
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++) scanf("%d",&arr[i]);
    quicksort(arr,0,n-1);
    for(int i=0;i<n;i++) printf("%d ",arr[i]);
    return 0;
}
```

	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.

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