5-Implementation of Quick Sort

Started on	Tuesday, 4 November 2025, 6:05 PM
State	Finished
Completed on	Tuesday, 4 November 2025, 9:12 PM
Time taken	3 hours 6 mins
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>
void quick(int a[],int l,int h){
    if(l>=h){
        return;
    }
    int p=a[h];
    int i = l-1;
    for(int j=l;j<h;j++){
        if(a[j]<=p){
            i++;
            int t = a[i];
            a[i]=a[j];
            a[j]=t;
        }
    }
    int t = a[i+1];
    a[i+1] = a[h];
    a[h]=t;
    int pi = i+1;
    quick(a,l,pi-1);
    quick(a,pi+1,h);
}
int main(){
    int n;
    scanf("%d",&n);
    int a[n];
    for(int i=0;i<n;i++){
        scanf("%d",&a[i]);
    }
    quick(a,0,n-1);
    for(int i=0;i<n;i++){
        printf("%d ",a[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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