Started on	Friday, 20 September 2024, 2:10 PM
State	Finished
Completed on	Friday, 20 September 2024, 4:15 PM
Time taken	2 hours 5 mins
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>
int partition(int arr[],int left,int right)
{
    int pivot = arr[left];
    int i = left, j = right;
    while(i<j){
        while(i <= right && pivot>=arr[i]){
            i++;
        }
        while(j>left && pivot<arr[j]){
            j--;
        }
        if(i<j){

        int temp = arr[i];
        arr[i] = arr[j];
        arr[j] = temp;
        }
    }

    if(i>j){
        arr[left]=arr[j];
        arr[j]=pivot;
    }
    return j;
}
void quick(int a[],int left,int right){
    if(left<right){
       int pivot = partition(a,left,right);
       quick(a,left,pivot-1);
       quick(a,pivot+1,right);
    }


}

int main(){
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++){
        scanf("%d",&arr[i]);

    }
    quick(arr,0,n-1);
     for(int i=0;i<n;i++){
        printf("%d ",arr[i]);

    }
}
```

	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.

◄ 4-Two Elements sum to x

Jump to...

1-DP-Playing with Numbers ►