Started on	Thursday, 12 September 2024, 11:13 AM
State	Finished
Completed on	Thursday, 19 September 2024, 11:55 AM
Time taken	7 days
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 l,int h) {
    int pivot=arr[l];
    int i=l+1;
    int t;
    for (int j=l+1;j<=h;j++){
        if (arr[j]<pivot) {
            t=arr[i];
            arr[i]=arr[j];
            arr[j]=t;
            i++;
        }
    }
    t=arr[l];
    arr[l]=arr[i - 1];
    arr[i-1]=t;
    return (i-1);
}
void quickSort(int arr[],int l,int h) {
    if (l<h){
        int pi=partition(arr,l,h);
        quickSort(arr,l,pi-1);
        quickSort(arr,pi+1,h);
    }
}
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	✔

	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.

◄ 4-Two Elements sum to x

Jump to...

1-DP-Playing with Numbers ►