

QUICK SORT

```
#include<stdio.h>
int quicksort(int arr[],int low,int high){
    int temp;
    int pivot=arr[low];
    int i=low;
    int j=high;
    if(low<high){
        while(i<j){
            while(arr[i]<=pivot&& i<high)i++;
            while(arr[j]>pivot)j--;
            if(i<j){
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
        temp=pivot;
        pivot=arr[j];
        arr[j]=temp;
        quicksort(arr,low,j - 1);
        quicksort(arr,j + 1,high);
    }
}

int main() {
    int arr[50],n,i;
    printf("Enter number of elements: ");
    scanf("%d",&n);
    printf("Enter %d elements:\n", n);
    for (i=0;i<n;i++)
        scanf("%d",&arr[i]);
    quicksort(arr,0,n-1);
    printf("Sorted array:\n");
    for (i=0;i<n;i++)
        printf("%d ",arr[i]);
    return 0;
}
```

OUTPUT:

```
Enter number of elements: 5
Enter 5 elements:
2
3
5
6
8
Sorted array:
2 3 5 6 8
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Process exited after 12.82 seconds with return value 0
Press any key to continue . . .
```