**Code:**

#include <bits/stdc++.h>

using namespace std;

int partition(int\* arr, int low, int high) {

int pivot = arr[low];

int i = low;

int j = high;

while (i < j) {

while (arr[i] <= pivot && i <= high - 1) i++;

while (arr[j] > pivot && j >= low + 1) j--;

if (i < j) swap(arr[i], arr[j]);

}

swap(arr[low], arr[j]);

return j;

}

void qs(int\* arr, int low, int high) {

if (low < high) {

int pIndex = partition(arr, low, high);

qs(arr, low, pIndex - 1);

qs(arr, pIndex + 1, high);

}

}

void quickSort(int\* arr,int n) {

qs(arr, 0, n - 1);

}

int main()

{

int n;

cout<<"Enter the number of elements: ";

cin>>n;

int arr[n];

cout<<"Enter the elements: ";

for(int i=0; i < n; i++) cin>>arr[i];

quickSort(arr,n);

cout << "After quick sort: " << "\n";

for (int i = 0; i < n; i++) cout << arr[i] << " ";

cout << "\n";

return 0;

}

**Output:**

