

```
#include <iostream.h>
#include <conio.h>
#include <stdlib.h>
#include <time.h>
const int N = 15;
int List[N];
void partition (int l, int r, int & p){
    int i, j, t;
    int pivot;
    pivot = List[l];
    j = l;
    for (i = l + 1; i <= r; i++){
        if (List[i] < pivot){
            j++;
            t = List[i];
            List[i] = List[j];
            List[j] = t;
        }
    }
    p = j;
    t = List[l];
    List[l] = List[p];
    List[p] = t;
}
void QuickSort(int l, int r){
    int p;
    if(r > l){
        partition(l,r,p);
        QuickSort(l,p - 1);
        QuickSort(p + 1,r);
    }
}
void print(){
    for(int i = 0 ; i <= N-1 ; i++)
        cout << List[i] << " ";
    cout << endl;
}
void main(){
    randomize();
    for(int i = 0 ; i <= N-1 ; i++)
        List[i] = random(100);
    cout << "Initial Array: \n";
    print();
    QuickSort(0, N-1);
    cout << "\nSorted Array: \n";
    print();
    getch();
}
```