```cpp
1: #include<iostream>
2: #include<omp.h>
3: using namespace std;
4:
5: void bubble(int arr[],int n)
6: {
7:     for(int i=0;i<n;i++)
8:     {
9:         int first=i%2;
10:        #pragma omp parallel for shared(arr,first)
11:        for(int j=first;j<n-1;j++)
12:        {
13:            if(arr[j]>arr[j+1])
14:            {
15:                swap(arr[j],arr[j+1]);
16:            }
17:        }
18:     }
19: }
20: void swap(int &a,int &b)
21: {
22:     int test;
23:     test=a;
24:     a=b;
25:     b=test;
26: }
27: int main()
28: {
29:     int n;
30:     cout<<"Enter the no of elements: ";
31:     cin>>n;
32:     int arr[n];
33:     cout<<"Enter elements: ";
34:     for(int i=0;i<n;i++)
35:     {
36:         cin>>arr[i];
37:     }
38:     bubble(arr,n);
39:     cout<<"Sorted array: ";
40:     for(int i=0;i<n;i++)
41:     {
42:         cout<<arr[i]<<" ";
43:     }
44:     return 0;
45: }
```