

```
1 #include <bits/stdc++.h>
2 #include <array>
3 using namespace std;
4 void bubbleSort(int arr[], int n)
5 {
6     int i, j;
7     bool swapped;
8     for (i = 0; i < n - 1; i++) {
9         swapped = false;
10        for (j = 0; j < n - i - 1; j++) {
11            if (arr[j] > arr[j + 1]) {
12                swap(arr[j], arr[j + 1]);
13                swapped = true;
14            }
15        }
16        if (swapped == false)
17            break;
18    }
19 }
20 void printArray(int arr[], int size)
21 {
22     int i;
23     for (i = 0; i < size; i++)
24         cout << " " << arr[i];
25 }
26 int main()
27 {
28     int size;
29     std::cout << "Enter the size of the array: ";
30     std::cin >> size;
31     if (size <= 0) {
32         std::cerr << "Invalid array size. Please enter a positive integer." ⚡
33             << std::endl;
34         return 1;
35     }
36     int array[size];
37
38     std::cout << "Enter the elements of the array:" << std::endl;
39     for (int i = 0; i < size; ++i) {
40         std::cout << "Element " << i + 1 << ": ";
41         std::cin >> array[i];
42     }
43
44     int N = sizeof(array) / sizeof(array[0]);
45     bubbleSort(array, N);
46     cout << "Sorted array: \n";
47     printArray(array, N);
48     return 0;
```

49 }