```cpp
/*--------Bubble Sort( O(n^2) for all cases )--------*/

#include<iostream>
using namespace std;

void inputArray(int arr[], int n)
{
    cout << "Enter the elements of your array: \n";
    for(int i = 0; i < n; i++)
    {
        cin >> arr[i];
    }
}

void printArray(int arr[], int n)
{
    for(int i = 0; i < n; i++)
    {
        cout << arr[i] << " ";
    }
}

void swap(int arr[], int i, int j)
{
    int temp = arr[i];
    arr[i] = arr[j];
    arr[j] = temp;
}

void bubbleSort(int arr[], int n)
{
    for(int i = 0; i < n - 1; i++)
    {
        for(int j = 0; j < n - i - 1; j++)
        {
            if(arr[j] > arr[j + 1])
            {
                swap(arr, j, j + 1);
            }
        }
    }
}

int main()
{
    int n;
```

```cpp
47:        cout << "Enter the length: \n";
48:        cin >> n;
49:
50:        int arr[n];
51:        inputArray(arr, n);
52:
53:        bubbleSort(arr, n);
54:
55:        cout << "Sorted array is: \n";
56:        printArray(arr, n);
57:
58:        return 0;
59: }
```