LAB 1

Write a program to sort an array using Bubble Sort technique. Also display its output.

```cpp
#include <iostream>
using namespace std;

int main()
{
    int n;
    cout << "Enter the number of elements" << endl;
    cin >> n;
    cout << "Enter the elements" << endl;
    int arr[n];
    for (int i = 0; i < n; i++)
    {
        cin >> arr[i];
    }
    cout << "Bubble Sorting the data" << endl;
    for (int i = 0; i < n; i++)
    {
        for (int j = 0; j < n - 1 - i; j++)
        {
            if (arr[j] > arr[j + 1])
            {
                arr[j] = arr[j] + arr[j + 1];
                arr[j + 1] = arr[j] - arr[j + 1];
                arr[j] = arr[j] - arr[j + 1];
            }
        }
    }
    cout << "Sorted array: " << endl;
    for (int i = 0; i < n; i++)
    {
        cout << arr[i];
    }
    cout<<"\n";
}
```

```
arv@arv:~/Data Structures$ ./"BubbleSort"
Enter the number of elements
5
Enter the elements
5
2
4
3
1
Bubble Sorting the data
Sorted array:
12345
```