#include<iostream>

using namespace std;

struct Student

{

    int rollNo;

    string name;

    float sgpa;

};

void insertionSort(Student arr[], int n)

{

    for (int i = 1; i < n; i++)

    {

        Student key = arr[i];

        int j = i - 1;

        while (j >= 0 && arr[j].rollNo > key.rollNo)

        {

            arr[j + 1] = arr[j];

            j = j - 1;

        }

        arr[j + 1] = key;

    }

}

void printList(Student arr[], int n)

{

    cout << "Roll No\tName\t\tSGPA" << endl;

    for (int i = 0; i < n; i++)

    {

        cout << arr[i].rollNo << "\t" << arr[i].name << "\t" << arr[i].sgpa << endl;

    }

}

int main() {

    const int n = 15;

    Student students[n] =

    {

        {20, "Digvijay", 8.1}, {38, "Pritesh", 7.5}, {21, "Amrita", 8.9},

        {37, "Prem", 6.8}, {22, "Joel", 7.2}, {36, "Tushar", 8.3},

        {23, "Dhanashree", 7.8}, {35, "Shashwati", 7.0}, {24, "Shivam", 6.5},

        {34, "Yadnesh", 8.6}, {25, "Rajvardhan", 7.9}, {33, "Mihir", 8.0},

        {26, "Prathmesh", 6.9}, {31, "Ajim", 8.5}, {27, "Anushka", 7.6}

    };

    cout << "Original Roll Call List:\n";

    printList(students, n);

    insertionSort(students, n);

    cout << "\nSorted Roll Call List (Ascending Order of Roll No):\n";

    printList(students, n);

    return 0;

}