

## 第二章 插入排序

```
#include <iostream>
#include <string>
using namespace std;
template<class T>
void InsertSort(T array[], int length){
    int i;
    for (int j = 1; j < length; j++){
        T key = array[j];
        i = j - 1;
        while (i >= 0 && array[i] > key){//array[i]<key则为倒序排序
            array[i + 1] = array[i];
            i--;
        }
        array[i + 1] = key;
    }
};
int main(){
    int n;
    cout << "输入数组长度: " << endl;
    cin >> n;
    int *arrays = new int[n];
    cout << "输入数组的各个数字: " << endl;
    int j = 0;
    while (j < n){
        cin >> arrays[j];
        j++;
    }
    InsertSort(arrays, n);
    j = 0;
    while (j < n){
        cout << arrays[j] << " ";
        j++;
    }
    cout << endl;
    delete arrays;
    return 0;
}
```

