# P16 2.2-2 选择排序

```cpp
#include <iostream>
using namespace std;
template<class T>
void Swap(T &a, T &b){
    T temp=a;
    a = b;
    b = temp;
}
template<class T>
void SelectionSort(T array[], int length){
    for (int i = 0; i < length - 1; i++){
        int min = i;
        for (int j = i + 1; j < length; j++){
            if (array[j] <array[ min]){
                min = j;
            }
        }
        Swap(array[i],array[min]);
    }
}
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++;
    }
    SelectionSort(arrays, n);
    j = 0;
    while (j < n){
        cout << arrays[j] << " ";
        j++;
    }
}
```

```cpp
    cout << endl;

    delete arrays;

    return 0;
}
```