

P46 4.1-5 最大子数组非递归线性运算

```
#include <iostream>
#include <limits>
using namespace std;
template<class T>
T FindMaximumSubarray(T array[], int low, int high, int *leftSubscript, int *rightSubscript){
    bool judgment = true;
    T maxSum = INT_MIN;
    T sum = 0;
    for (int i = low; i <= high; i++){
        if (array[i] >= 0){
            judgment = false;
        }
        if (array[i] > maxSum){
            maxSum = array[i];
            *leftSubscript = i;
            *rightSubscript = i;
        }
    }
    if (judgment = true){
        return maxSum;
    }
    int i = 0;
    for (int j = low; j <= high; j++){
        sum = sum + array[j];
        if (array[j] >= 0){
            if (sum > maxSum){
                maxSum = sum;
                *leftSubscript = i;
                *rightSubscript = j;
            }
        }
        else{
            i = j;
            sum = 0;
        }
    }
}
```

```
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++;  
    }  
    int leftSubscript;  
    int rightSubscript;  
    int sum = 0;  
    sum = FindMaximumSubarray(arrays, 0, n - 1, &leftSubscript, &rightSubscript);  
    cout << leftSubscript << " " << rightSubscript << " " << sum << endl;  
    delete arrays;  
    return 0;  
}
```