/\*

Given an array of n integers where n > 1, nums, return an array output such that output[i] is equal to the product of all the elements of nums except nums[i].

Solve it without division and in O(n).

For example, given [1,2,3,4], return [24,12,8,6].

不能用除法

两个数组，left[] right[] 分别存i元素左右的乘积

\*/

class Solution {

public:

vector<int> productExceptSelf(vector<int>& nums)

{

int n=nums.size();

vector<int> left(n,1);

vector<int> right(n,1);

for(int i=1;i<n;i++)

left[i]=left[i-1]\*nums[i-1];

for(int i=n-2;i>=0;i--)

right[i]=right[i+1]\*nums[i+1];

vector<int> ret;

for(int i=0;i<n;i++)

ret.push\_back(left[i]\*right[i]);

return ret;

}

};