1046. Shortest Distance (20)

时间限制

100 ms

内存限制

65536 kB

代码长度限制

16000 B

判题程序

Standard

作者

CHEN, Yue

The task is really simple: given N exits on a highway which forms a simple cycle, you are supposed to tell the shortest distance between any pair of exits.

**Input Specification:**

Each input file contains one test case. For each case, the first line contains an integer N (in [3, 105]), followed by N integer distances D1 D2 ... DN, where Di is the distance between the i-th and the (i+1)-st exits, and DN is between the N-th and the 1st exits. All the numbers in a line are separated by a space. The second line gives a positive integer M (<=104), with M lines follow, each contains a pair of exit numbers, provided that the exits are numbered from 1 to N. It is guaranteed that the total round trip distance is no more than 107.

**Output Specification:**

For each test case, print your results in M lines, each contains the shortest distance between the corresponding given pair of exits.

**Sample Input:**

5 1 2 4 14 9

3

1 3

2 5

4 1

**Sample Output:**

3

10

7

这道题一开始做的时候想到的思路是空间换时间，这个思路是对的，但是后面就有点走偏到视觉化的方向上了而没有从这个环本身的结构上来考虑，同时也应该太久没做打表题了。

#include<iostream>

#include<string>

#include<algorithm>

#include<queue>

#include<vector>

#include<sstream>

#define ll long long

#include<stack>

using namespace std;

vector<int>roll;

int main()

{

int num;

cin >> num;

int total = 0;

roll.push\_back(0);

int temp;

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

{

scanf("%d" ,&temp);

total += temp;

roll.push\_back(total);

}

cin >> temp;

total += temp;

int test;

cin >> test;

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

{

int a,b;

scanf("%d %d",&a,&b);

if (a > b)swap(a, b);

int res = roll[b-1] - roll[a-1];

cout << min(res, total - res)<<endl;

}

}