算法exercise06

homework

```cpp
#include<iostream>
#include<cstdio>
#include<algorithm>

const int N = 100;
using namespace std ;
int main()
{
    int i, j, n, a, b, c, d, ans = 0;
    int l[N], r[N], m[2][N] = {0}, w[N] = {0}, p[2][N] = {0};

    cin >> n;

    for(i=1;i<=n;i++)    cin >> l[i] >> r[i]; //输入源数据

    m[0][1] = m[1][1] = 0;

    for(i=1;i<n;i++)//
    {
        //  a|b     c|d
        //  si      si+1
        a = l[i], b = r[i];
        c = l[i+1], d = r[i+1];

        if((m[0][i] + b*c) > (m[1][i] + a*c))
            m[0][i+1] += m[0][i] + b*c, p[0][i+1] = 0;  //ab cd
        else
            m[0][i+1] += m[0][i] + a*c, p[0][i+1] = 1;  //ba cd

        if((m[0][i] + b*d) > (m[1][i] + a*d))
            m[1][i+1] += m[0][i] + b*d, p[1][i+1] = 0; //ab dc
        else
            m[1][i+1] += m[0][i] + a*d, p[1][i+1] = 1; //ba dc
    }

    if(m[0][n] > m[1][n])
        w[n] = 0, cout << m[0][n] << endl;
    else
        w[n] = 1, cout << m[1][n] << endl;
```

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40.
41.         //从后往前，以最后一个数对的位置为准，向前推算位置状态
42.         for(i=n; i>1; i--)
43.             if(w[i] == 0)    w[i-1] = p[0][i];
44.             else             w[i-1] = p[1][i];
45.
46.         for(i=1;i<=n;i++)    cout << w[i] << " ";
47.     }
```