

差分

人员

郭栩睿、邹忆航、宋吉相、李沛都、陶汇笙、崔宸赫、王恩泽、洪晨栋、洪晨棋、罗启宸 到课

作业检查

上周作业链接: <https://www.luogu.com.cn/contest/241311>

2025-0412周六10:30

报名

编辑比赛

题目数4 | 报名人数13

比赛说明 | 题目列表 | 排行榜

名次	参赛者	总分	A	B	C	D
#1	洪晨棋	400 (4.71d)	100 (1.01d)	100 (1.05d)	100 (1.11d)	100 (1.54d)
#2	邹忆航	400 (4.98d)	100 (1.48s)	100 (2.13h)	100 (2.44d)	100 (2.46d)
#3	洪晨栋	400 (6.60d)	100 (1.01d)	100 (1.06d)	100 (1.07d)	100 (3.46d)
#4	郭栩睿	330 (6.29d)	100 (1.33s)	100 (159ms)	30 (0ms)	100 (6.29d)
#5	宋吉相	260 (20.31d)	100 (6.38d)	60 (6.97d)	100 (6.96d)	
#6	陶汇笙	140 (1.46s)	100 (1.46s)	40 (0ms)		
#7	马敬杰	100 (1.31s)	100 (1.31s)			
#8	王恩泽	100 (1.32s)	100 (1.32s)			
#9	罗启宸	0 (0ms)	0 (0ms)			
#10	张曦月	0 (0ms)		0 (0ms)		

作业

<https://www.luogu.com.cn/contest/242622> (课上讲了 A ~ D 这些题, 课后必做作业是 E 题, 选做作业是 F 题)

课堂表现

这节课新学了 差分 这个内容, 同学们课上听讲都很认真, 基本都听懂了。

洪晨棋 同学这节课做题表现最好, 提出表扬!!!

课堂内容

B4038 [GESP202409 三级] 平衡序列

```
#include <bits/stdc++.h>

using namespace std;

const int maxn = 10000 + 5;
int w[maxn], p[maxn];

int get_sum(int l, int r) { return p[r] - p[l-1]; }

void solve() {
    int n; cin >> n;
    for (int i = 1; i <= n; ++i) cin >> w[i], p[i] = p[i-1] + w[i];

    for (int i = 1; i <= n-1; ++i) {
        if (get_sum(1,i) == get_sum(i+1,n)) {
            cout << "Yes" << endl; return;
        }
    }
    cout << "No" << endl;
}

int main()
{
    int T; cin >> T;
    while (T -- ) solve();
    return 0;
}
```

P2367 语文成绩

```
#include <bits/stdc++.h>

using namespace std;

const int maxn = 5e6 + 5;
int w[maxn], c[maxn];
int p[maxn];

int main()
{
    int n, m; cin >> n >> m;
    for (int i = 1; i <= n; ++i) cin >> w[i], c[i] = w[i] - w[i-1];
    while (m -- ) {
        int l, r, x; cin >> l >> r >> x;
        c[l] += x, c[r+1] -= x;
    }
    for (int i = 1; i <= n; ++i) p[i] = p[i-1] + c[i];

    int minn = 1e9;
    for (int i = 1; i <= n; ++i) minn = min(minn, p[i]);
}
```

```
    cout << minn << endl;
    return 0;
}
```

P11853 [CSP-J2022 山东] 植树节

```
#include <bits/stdc++.h>

using namespace std;

const int maxn = 1e6 + 5;
int c[maxn], p[maxn];

int main()
{
    int n; cin >> n;
    while (n -- ) {
        int l, r; cin >> l >> r; l++, r++;
        c[l]++, c[r+1]--;
    }

    for (int i = 1; i <= 1000001; ++i) p[i] = p[i-1] + c[i];

    int maxx = 0;
    for (int i = 1; i <= 1000001; ++i) maxx = max(maxx, p[i]);
    cout << maxx << endl;
    return 0;
}
```

P9094 [PA 2020] Mieszanie kolorów

```
#include <bits/stdc++.h>

using namespace std;

const int maxn = 1e6 + 5;
int c1[maxn], c2[maxn], c3[maxn];
int p1[maxn], p2[maxn], p3[maxn];

int main()
{
    int n, m; cin >> n >> m;
    while (m -- ) {
        int l, r, k; cin >> l >> r >> k;
        if (k == 1) {
            c1[l]++, c1[r+1]--;
        } else if (k == 2) {
            c2[l]++, c2[r+1]--;
        }
    }
}
```

```

    } else {
        c3[l]++, c3[r+1]--;
    }
}

for (int i = 1; i <= n; ++i) {
    p1[i] = p1[i-1] + c1[i];
    p2[i] = p2[i-1] + c2[i];
    p3[i] = p3[i-1] + c3[i];
}

int res = 0;
for (int i = 1; i <= n; ++i) {
    if (p1[i] && p2[i] && !p3[i]) ++res;
}
cout << res << endl;
return 0;
}

```

P2280 [HNOI2003] 激光炸弹

```

#include <bits/stdc++.h>

using namespace std;

const int maxn = 5000 + 5;
int w[maxn][maxn], p[maxn][maxn];

int get_sum(int x1, int y1, int x2, int y2) {
    return p[x2][y2] - p[x1-1][y2] - p[x2][y1-1] + p[x1-1][y1-1];
}

int main()
{
    int n, m; cin >> n >> m;
    for (int i = 1; i <= n; ++i) {
        int x, y, v; cin >> x >> y >> v;
        w[x+1][y+1] += v;
    }

    for (int i = 1; i <= 5001; ++i) {
        for (int j = 1; j <= 5001; ++j) {
            p[i][j] = p[i-1][j] + p[i][j-1] - p[i-1][j-1] + w[i][j];
        }
    }

    int res = 0;
    for (int i = 1; i+m-1 <= 5001; ++i) {
        for (int j = 1; j+m-1 <= 5001; ++j) {
            res = max(res, get_sum(i,j,i+m-1,j+m-1));
        }
    }
}

```

```
}  
cout << res << endl;  
return 0;  
}
```