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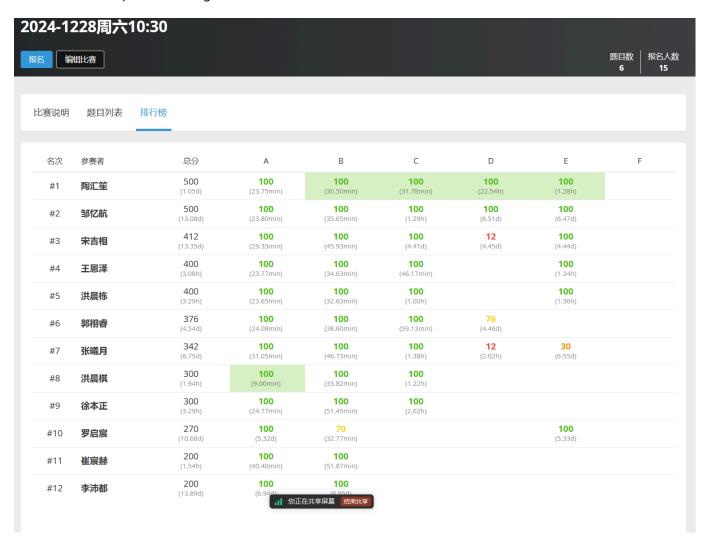
# Final Day

### 人员

郭栩睿、罗启宸、邹忆航、徐本正、张曦月、李沛都、宋吉相、崔宸赫、温郝冬 到课, 陶汇笙、王恩泽 线上

### 作业检查

上周作业链接: https://www.luogu.com.cn/contest/222238



### 作业

https://www.luogu.com.cn/contest/223228

## 课堂表现

今天课上题目比较多,有些同学课上做题慢一些的,可能还剩较多题目没有完成,这些同学课下一定要好好补完没做的题目。

### 课堂内容

#### P1007 独木桥

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```
#include <bits/stdc++.h>
using namespace std;
int main()
 int L, n; cin >> L >> n;
 int res1 = 0, res2 = 0;
 for (int i = 1; i <= n; ++i) {
   int x; cin >> x;
   res1 = max(res1, min(x, L+1-x));
    res2 = max(res2, max(x, L+1-x));
  }
 cout << res1 << " " << res2 << endl;</pre>
 return 0;
}
```

#### P1478 陶陶摘苹果 (升级版)

```
#include <bits/stdc++.h>
using namespace std;
struct node {
   int x, y;
};
const int maxn = 5000 + 5;
node w[maxn];
bool cmp(node p, node q) {
    return p.y < q.y;</pre>
}
int main()
{
    int n, s; cin >> n >> s;
    int a, b; cin >> a >> b;
    for (int i = 1; i <= n; i++) {
        cin >> w[i].x >> w[i].y;
    sort(w+1, w+n+1, cmp);
    int cnt = 0;
    for (int i = 1; i <= n; i++) {
        if (w[i].x <= a+b \&\& s>= w[i].y) {
            cnt++;
            s -= w[i].y;
        }
```

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```
cout << cnt << endl;
return 0;
}</pre>
```

#### AT\_abc228\_c Final Day

```
struct node {
    int sum, id;
};
bool cmp(node p, node q) {
    return p.sum > q.sum;
}
for (int i = 1; i <= n; i++) {
    int a, b, c;
    cin >> a >> b >> c;
    a[i].sum = a+b+c;
    a[i].id = i;
}
sort(a+1, a+n+1, cmp);
bool ans[maxn];
for (int i = 1; i <= n; i++) {
    if (a[i].sum+300 >= a[k].sum) {
        ans[a[i].id] = true;
    }
}
```

#### AT\_abc230\_c X drawing

```
1. max(1-A,1-B) <= k <= min(N-A,N-B) -> (A+k,B+k)
2. max(1-A,B-N) <= k <= min(N-A,B-1) -> (A+k,B+k)

bool check(int x, int y) {
    // 点 (x,y) 如果是黑, 返回 true; 如果是白, 返回 false
    int k1 = x-A, k2 = y-B;
    if (k1==k2 && ...<=k1<=...) return true;

int k3 = ..., k4 = ...;
    if (k3==k4 && ...<=k3<=...) return true;

return false;
}

for (int i = P; i <= Q; i++) {
    for (int j = R; j <= S; j++) {
```

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```
if (check(i,j)) cout << "#";
    else cout << ".";
}
cout << endl;
}</pre>
```