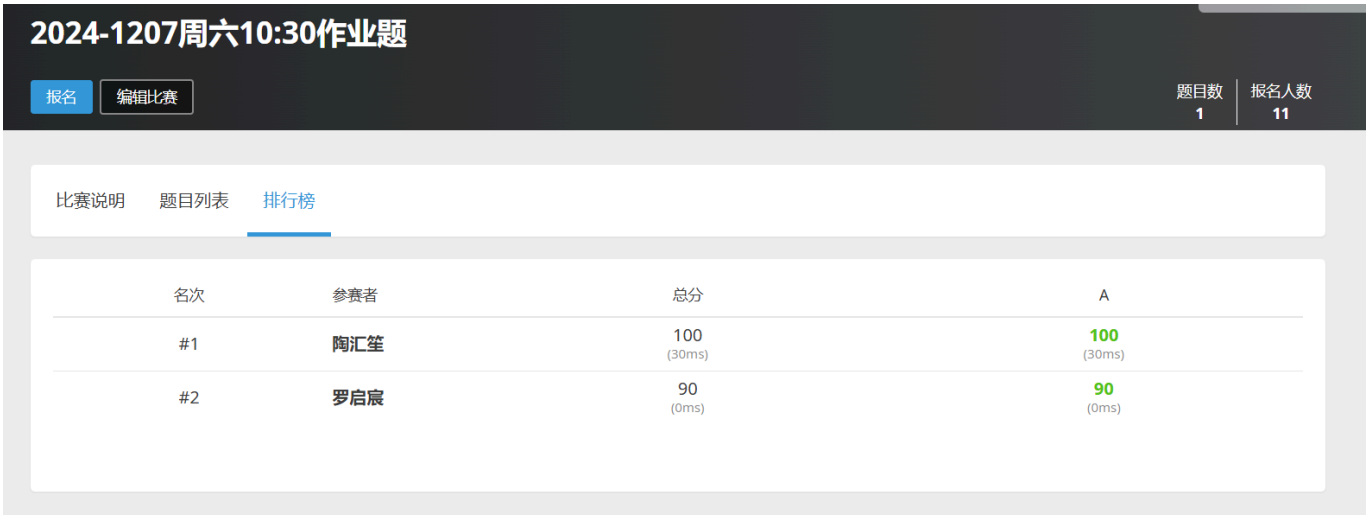
跳绳得分问题

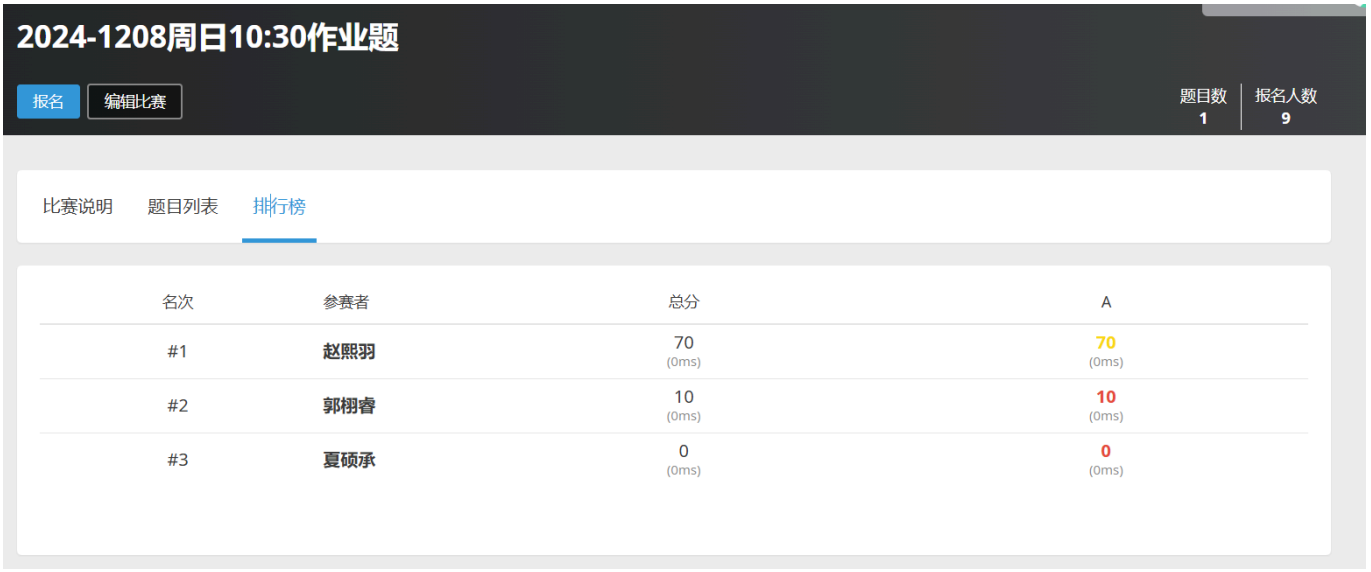
人员

陶汇笙、邹忆航、郭栩睿、温郝冬、洪晨栋、洪晨棋、徐本正、张曦月、李沛都、崔宸赫、王恩泽、张昱霖、王静嘉 到课

作业检查

上周作业链接: https://www.luogu.com.cn/contest/218652





上周作业只有 陶汇笙、罗启宸、郭栩睿 3 位同学课下思考完成

作业

https://www.luogu.com.cn/contest/219817 (A B C 必须完成, D 题选做)

课堂表现

今天的第一题和第二题都比较简单, 有些同学在这 2 个题目上卡了比较久的时间, 课下要好好复习以下今天的题目。

课堂内容

AT_abc206_b Savings

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

using namespace std;

int main()
{
  int n; cin >> n;
  int res = 0;
  for (int i = 1; i <= n; ++i) {
    res += i;
    if (res >= n) {
      cout << i << endl;
      break;
    }
  }
  return 0;
}
```

AT_abc227_c ABC conjecture

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

using namespace std;

typedef long long LL;

int main()
{
  LL n; cin >> n;
  LL res = 0;
  for (LL i = 1; i*i*i <= n; ++i) {
    for (LL j = i; i*j*j <= n; ++j) {
      LL k_min = j, k_max = n/(i*j);
      if (k_max >= k_min) res += k_max-k_min+1;
    }
  }
  cout << res << endl;
  return 0;
}
```

U512586 skip

1. 9,7,6,5,4,3,2,1

2. 如果不满8人，前 n-1 人得分
   -> n, n-2, n-3, n-4, ...

3. <3 人，全为 0 分

4. 成绩相同，排名并列，得分相同

5. 破纪录，得分翻倍

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

using namespace std;

const int maxn = 200 + 5;
struct node {
    int fen, id;
} a[maxn];
bool cmp(node p, node q) {
    return p.fen > q.fen;
}
int b[maxn];

int main()
{
    int n, m;
    cin >> n >> m;
    for (int i = 1; i <= n; i++) {
        cin >> a[i].fen;
        a[i].id = i;
    }

    if (n < 3) {
        for (int i = 1; i <= n; i++) {
            cout << 0 << " ";
        }
        cout << endl;
        return 0;
    }

    sort(a+1, a+n+1, cmp);
    if (n >= 8) {
        b[a[1].id] = 9;
        for (int i = 2; i <= n; i++) {
            if (a[i].fen == a[i-1].fen) {
                b[a[i].id] = b[a[i-1].id];
            } else {
                b[a[i].id] = max(0, 9-i);
            }
```

```
        }
    } else {
        b[a[1].id] = n;
        for (int i = 2; i <= n; i++) {
            if (a[i].fen == a[i-1].fen) {
                b[a[i].id] = b[a[i-1].id];
            } else {
                b[a[i].id] = n-i;
            }
        }
    }

    for (int i = 1; i <= n; i++) {
        if (a[i].fen > m) {
            b[a[i].id] *= 2;
        }
    }

    for (int i = 1; i <= n; i++) cout << b[i] << " ";
    cout << endl;
    return 0;
}
```