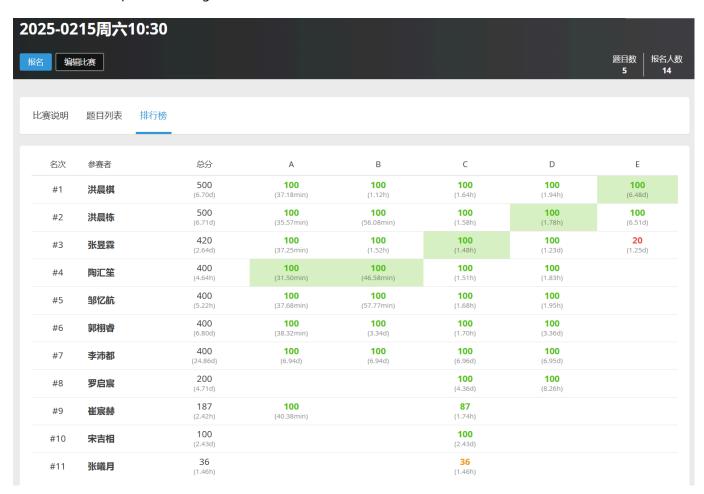
# 卡布列克圆舞曲

# 人员

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### 作业检查

上周作业链接: https://www.luogu.com.cn/contest/231079



### 作业

https://www.luogu.com.cn/contest/232154 (课上讲了 A~C 3 个题, 课后作业是 D 题)

## 课堂表现

今天课上的题目比较复杂一些,同学们课上做题效果不是很理想,课下要认真补补题。

## 课堂内容

#### P1532 卡布列克圆舞曲

#include <bits/stdc++.h>

```
using namespace std;
typedef long long LL;
LL calc(LL x) {
   vector<int> vec;
    while (x != 0) {
        vec.push_back(x\%10), x/=10;
    }
    LL minn = 0, maxx = 0;
    sort(vec.begin(), vec.end());
    for (int i : vec) minn = minn*10 + i;
    reverse(vec.begin(), vec.end());
    for (int i : vec) maxx = maxx*10 + i;
    return maxx - minn;
}
void solve(LL n) {
    set<LL> s;
    while (true) {
        if (s.count(n)) {
            LL t = n;
            while (true) {
                cout << t << " ";
                t = calc(t);
                if (t == n) break;
            }
            cout << endl;</pre>
            return;
        } else {
            s.insert(n);
            n = calc(n);
        }
   }
}
int main()
    LL n;
    while (cin >> n) {
       solve(n);
    return 0;
}
```

#### P1413 坚果保龄球

```
#include <bits/stdc++.h>
using namespace std;
vector<int> vec[10];
int calc(vector<int> vv) {
    if (vv.empty()) return 0;
    sort(vv.begin(), vv.end());
    int res = 1, time = vv[0], n = vv.size();
    for (int i = 0; i < n; i++) {
        if (vv[i]-time < 60) continue;</pre>
        res++, time = vv[i];
    return res;
}
int main()
{
    int n; cin >> n;
    while (n -- ) {
        int x, y; cin >> x >> y;
        vec[x].push_back(y);
    }
    int sum = 0;
    for (int i = 1; i <= 6; i++) {
        sum += calc(vec[i]);
    cout << sum << endl;</pre>
    return 0;
}
```

#### P1056 [NOIP 2008 普及组] 排座椅

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

using namespace std;

const int maxn = 2000 + 5;
int a[maxn], b[maxn];
struct node {
   int cnt, id;
} c[maxn], d[maxn];
bool cmp1(node p, node q) {
   return p.cnt > q.cnt;
}
bool cmp2(node p, node q) {
   return p.id < q.id;</pre>
```

```
int main()
{
    int n, m, K, L, D; cin >> n >> m >> K >> L >> D;
   while (D -- ) {
        int x1, y1, x2, y2; cin >> x1 >> y1 >> x2 >> y2;
        if (x1 == x2) b[min(y1,y2)]++;
        else a[min(x1,x2)]++;
    }
    for (int i = 1; i \le n; i++) c[i] = \{a[i], i\};
    for (int i = 1; i \le m; i++) d[i] = \{b[i], i\};
    sort(c+1, c+n+1, cmp1); sort(d+1, d+m+1, cmp1);
    sort(c+1, c+K+1, cmp2); sort(d+1, d+L+1, cmp2);
    for (int i = 1; i <= K; i++) cout << c[i].id << " ";
    cout << endl;</pre>
    for (int i = 1; i <= L; i++) cout << d[i].id << " ";
    cout << endl;</pre>
    return 0;
}
```