

# Coin Selection G

## 人员

郭栩睿、邹忆航、洪晨栋、洪晨棋、陶汇笙 到课, 崔宸赫、罗启宸、王恩泽 线上

## 作业检查

上周作业链接: <https://www.luogu.com.cn/contest/223228>

2025-0104周六10:30

报名

编辑比赛

题目数 5 | 报名人数 16

比赛说明

题目列表

排行榜

名次	参赛者	总分	A	B	C	D	E
#1	宋吉相	500 (17.05d)	100 (45.90min)	100 (1.61h)	100 (5.35d)	100 (5.44d)	100 (6.16d)
#2	邹忆航	500 (24.86d)	100 (47.17min)	100 (6.26d)	100 (6.33d)	100 (6.32d)	100 (6.38d)
#3	郭栩睿	400 (4.41h)	100 (34.75min)	100 (58.37min)	100 (1.24h)	100 (1.62h)	
#4	陶汇笙	400 (4.52d)	100 (30.72min)	100 (38.40min)	100 (1.01h)	100 (4.43d)	
#5	徐本正	300 (2.60h)	100 (28.93min)	100 (57.28min)	100 (1.16h)		
#6	罗启宸	300 (13.35d)	100 (32.93min)	100 (6.24d)	100 (7.09d)		
#7	洪晨栋	300 (24.86d)		100 (8.42d)	100 (8.44d)	100 (8.48d)	
#8	洪晨棋	300 (24.86d)		100 (8.43d)	100 (8.44d)	100 (10.51d)	
#9	王恩泽	200 (1.34h)	100 (23.98min)	100 (56.67min)			
#10	温郝冬	200 (1.68h)	100	100			
#11	张曦月	200 (1.91h)	100 (40.65min)	100 (1.23h)			
#12	崔宸赫	200 (1.95h)	100 (38.55min)	100 (1.31h)			

## 作业

<https://www.luogu.com.cn/contest/226027> (课上讲了 A,B,C,D 4 个题, 课后必做作业是 E,F 2 个题, 选做作业是 G 题)

## 课堂表现

今天课上的题目整体不是很难, 同学们应该做到比较轻松的通过所有题目, 同学们哪道题目不熟的课下要好好复习。

## 课堂内容

P1008 [NOIP1998 普及组] 三连击

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

using namespace std;

int cnt[10];

int main()
{
    for (int i = 100; i <= 333; i++) {
        int j = 2*i, k = 3*i;
        int a = i, b = j, c = k;
        for (int l = 1; l <= 9; l++) {
            cnt[l] = 0;
        }

        for (int l = 1; l <= 3; l++) {
            cnt[a%10]++, cnt[b%10]++, cnt[c%10]++;
            a /= 10, b /= 10, c /= 10;
        }

        bool flag = true;
        for (int l = 1; l <= 9; l++) {
            if (cnt[l] != 1) {
                flag = false;
            }
        }
        if (flag == true) {
            cout << i << " " << j << " " << k << endl;
        }
    }
    return 0;
}
```

### P1618 三连击 (升级版)

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

using namespace std;

int cnt[15];

int main()
{
    int x, y, z; cin >> x >> y >> z;
    if (x == 0) {
        cout << "No!!!" << endl;
        return 0;
    }

    int tot = 0;
```

```
for (int j = 100; j <= 999; ++j) {
    if (j*y%x != 0) continue;
    if (j*z%x != 0) continue;

    int a = j, b = j*y/x, c = j*z/x;
    if (c > 999) continue;
    for (int i = 1; i <= 9; ++i) cnt[i] = 0;
    while (a) {
        cnt[a%10]++, a /= 10;
    }
    while (b) {
        cnt[b%10]++, b /= 10;
    }
    while (c) {
        cnt[c%10]++, c /= 10;
    }
    bool flag = true;
    for (int i = 1; i <= 9; ++i) {
        if (cnt[i] != 1) flag = false;
    }
    if (flag) {
        cout << j << " " << j*y/x << " " << j*z/x << endl;
        ++tot;
    }
}

if (!tot) cout << "No!!!" << endl;
return 0;
}
```

### B3688 [语言月赛202212] 旋转排列

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

using namespace std;

int a[2005];

int main()
{
    int n;
    cin >> n;
    for (int i = 1; i <= n; i++) {
        cin >> a[i];
    }

    while (true) {
        int t = a[n];
        for (int i = n; i >= 2; i--) {
            a[i] = a[i-1];
        }
    }
}
```

```

    a[1] = t;
    for (int i = 1; i <= n; i++) {
        cout << a[i] << " ";
    }
    cout << endl;
    if (a[n] == n) {
        break;
    }
}
return 0;
}

```

### B3723 [语言月赛202303] Coin Selection G

```

#include <bits/stdc++.h>

using namespace std;

typedef long long LL;
const int maxn = 1000 + 5;
LL w[maxn];

int main()
{
    int n; cin >> n;
    for (int i = 1; i <= n; ++i) cin >> w[i];

    LL sum1 = 0, sum2 = 0;
    for (int i = 1; i <= n; ++i) {
        sort(w+1, w+n+1);
        if (i%2 == 1) { // sum1
            if (sum1 < w[i]) sum1 += w[i], w[i] = 0;
            else {
                for (int j = n; ; --j) {
                    if (w[j] <= sum1) {
                        sum1 += w[j], w[j] = 0;
                        break;
                    }
                }
            }
        }
        else { // sum2
            if (sum2 < w[i]) sum2 += w[i], w[i] = 0;
            else {
                for (int j = n; ; --j) {
                    if (w[j] <= sum2) {
                        sum2 += w[j], w[j] = 0;
                        break;
                    }
                }
            }
        }
    }
}

```

```
}  
cout << sum1 << " " << sum2 << endl;  
return 0;  
}
```