

vector数组的使用

人员

郭栩睿、洪晨栋、洪晨棋、李沛都、陶汇笙、罗启宸、张昱霖、邹忆航、宋吉相、张曦月、王静嘉、崔宸赫 到课

作业检查

上周作业链接: <https://www.luogu.com.cn/contest/229689>

2025-0208周六10:30

报名

编辑比赛

题目数4 | 报名人数11

比赛说明

题目列表

排行榜

名次	参赛者	总分	A	B	C	D
#1	郭栩睿	400 (7.07d)	100 (32.63min)	100 (1.48h)	100 (1.94h)	100 (6.90d)
#2	洪晨栋	300 (3.93h)	100 (33.18min)	100 (1.53h)	100 (1.84h)	
#3	洪晨棋	300 (6.55d)	100 (38.77min)	100 (1.59h)	100 (6.46d)	
#4	李沛都	200 (13.83d)	100 (6.91d)	100 (6.92d)		
#5	陶汇笙	140 (2.13h)	100 (32.65min)	40 (1.59h)		
#6	徐本正	100 (1.53h)		100 (1.53h)		
#7	罗启宸	100 (6.32d)	100 (6.32d)			
#8	邹忆航	0 (0ms)				
#9	崔宸赫	0 (0ms)				

作业

<https://www.luogu.com.cn/contest/231079> (课上讲了 A~D 4 个题, 课后作业是 E 题)

课堂表现

陶汇笙、洪晨栋、邹忆航、洪晨棋 课上做题表现比较好, 也有几位同学课上题目做的比较差, 课下要好好再做一做。

课堂内容

B3977 [语言月赛 202405] 更好的交换

```
#include<iostream>
using namespace std;
```

```

int a[1005][1005],b[1005],c[1005];
int main(){
    int n,m;
    cin>>n>>m;
    for(int i=1;i<=n;i++){
        for(int j=1;j<=n;j++){
            cin>>a[i][j];
            b[i]=i,c[j]=j;
        }
    }
    for(int i=1;i<=m;i++){
        int op,x,y;
        cin>>op>>x>>y;
        if(op==1){
            swap(b[x],b[y]);
        }else{
            swap(c[x],c[y]);
        }
    }
    for(int i=1;i<=n;i++){
        for(int j=1;j<=n;j++){
            cout<<a[b[i]][c[j]]<<" ";
        }
        cout<<endl;
    }
    return 0;
}

```

U516889 combine

```

#include <bits/stdc++.h>

using namespace std;

int main()
{
    stack<int> stk;
    int n; cin >> n;
    while (n -- ) {
        int x; cin >> x;
        stk.push(x);
        while (stk.size() >= 2) {
            int a = stk.top(); stk.pop();
            int b = stk.top(); stk.pop();
            if (a == b) stk.push(a+1);
            else {
                stk.push(b), stk.push(a);
                break;
            }
        }
    }
}

```

```
    cout << stk.size() << endl;
    return 0;
}
```

P1459 [USACO2.1] 三值的排序 Sorting a Three-Valued Sequence

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

using namespace std;

int a[1005];

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

    int cnt1 = 0, cnt2 = 0;
    for (int i = 1; i <= n; i++) {
        if (a[i] == 1) cnt1++;
        else if (a[i] == 2) cnt2++;
    }

    int res = 0, c2 = 0;
    for (int i = 1; i <= cnt1; i++) {
        if (a[i] != 1) {
            res++;
            if (a[i] == 2) c2++;
        }
    }

    for (int i = cnt1+1; i <= n; i++) {
        if (a[i] == 1) {
            if (c2 == 0) a[i] = 3;
            else {
                a[i] = 2;
                c2--;
            }
        }
    }

    for (int i = cnt1+1; i <= cnt1+cnt2; i++) {
        if (a[i] == 3) res++;
    }
    cout << res << endl;
    return 0;
}
```

U499172 找每个数出现的第 k 个位置

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

using namespace std;

vector<int> vec[500005];

int main()
{
    int n, m; cin >> n >> m;
    for (int i = 1; i <= n; i++) {
        int x; cin >> x;
        vec[x].push_back(i);
    }

    while (m -- ) {
        int x, k; cin >> x >> k;
        cout << vec[x][k-1] << endl;
    }
    return 0;
}
```