

# 牛客多校第二场

这场彻底跪了。

那我贴一贴莫名WA掉的代码们吧。如果读者能找到到底是哪里WA掉了，麻烦您联系我一下。

## C

我觉得从奇顶点开始DFS一定没错。但是评测机不这么认为.....

```
#include<stdio.h>
#include<vector>

using namespace std;

int degree[200010];

vector<int> Adj[200010];
bool vis[200010] = {false};

int flag;

void DFS(int u)
{
    vis[u]=true;
    if(degree[u]%2==1)
    {
        printf("%d", u);
        (flag==0)?putchar(' '):putchar('\n');
        flag^=1;
    }
    int i;
    for(i=0;i<Adj[u].size();i++)
    {
        int v=Adj[u][i];
        if(vis[v]==false)
        {
            DFS(v);
        }
    }
}

int main()
{
    int n;
    scanf("%d", &n);
    if(n==1)
```

```
{  
    printf("1\n1 1\n");  
    return 0;  
}  
int m=n-1;  
int x,y;  
int sum=0;  
while(m--)  
{  
    scanf("%d%d",&x,&y);  
    degree[x]++;  
    degree[y]++;  
    Adj[x].push_back(y);  
    Adj[y].push_back(x);  
    if(degree[x]%2==1&&degree[y]%2==1)  
    {  
        sum++;  
    }  
    else if(degree[x]%2==0&&degree[y]%2==0)  
    {  
        sum--;  
    }  
}  
printf("%d\n",sum);  
flag=0;  
int u;  
for(u=0;u<n;u++)  
{  
    if(vis[u]==false&&degree[u]%2==1)  
    {  
        DFS(u);  
        break;  
    }  
}  
}
```

后记：我知道错到哪里了！我一直以为是不重复的覆盖.....

其实重复也是可以的，也就是说我硬生生拔高了原题的难度.....

唉，怪不得。那么代码就更简单了low的不谈

上面这个代码是不重复覆盖的优秀代码

## B

储存斜率用了两种做法。开long long那个TLE掉了double那个WA了，实在无语.....

```
#include<iostream>
#include<vector>
#include<map>

using namespace std;

#define x first
#define y second

vector<pair<double,double>> points;

int maxPoints()
{
    int res = 0;
    for (int i = 0; i < points.size(); ++i)
    {
        map<double,int> m;
        int duplicate = 1;
        for (int j = i + 1; j < points.size(); ++j)
        {
            if (points[i].x == points[j].x && points[i].y == points[j].y)
            {
                ++duplicate;
                continue;
            }
            if (points[j].x * points[i].y == points[i].x * points[j].y)
            {
                continue;
            }
            double dx = points[j].x - points[i].x;
            double dy = points[j].y - points[i].y;
            ++m[{dx/dy}];
        }
        res = max(res, duplicate);
        map<double,int>::iterator it;
        for (it = m.begin(); it != m.end(); ++it)
        {
            res = max(res, it->second + duplicate);
        }
    }
    return res;
}

int main()
{
    int n;
    scanf("%d", &n);
    double x,y;
    while(n--)
    {
```

```
    cin >> x >> y;
    double temp=x*x+y*y;
    points.push_back(make_pair(x/temp,y/temp));
}
cout << maxPoints() << endl;
return 0 ;
}
```

```
#include<iostream>
#include<vector>
#include<map>

using namespace std;

vector<pair<long long, long long> > points;

long long gcd(long long a, long long b)
{
    return (b == 0) ? a : gcd(b, a % b);
}

int maxPoints()
{
    int res = 0;
    for (int i = 0; i < points.size(); ++i)
    {
        map<pair<int, int>, int> m;
        int duplicate = 1;
        for (int j = i + 1; j < points.size(); ++j)
        {
            if (points[i].first== points[j].first&& points[i].second== points[j].second)
            {
                ++duplicate;
                continue;
            }
            long long x1=points[i].first;
            long long x2=points[j].first;
            long long y1=points[i].second;
            long long y2=points[j].second;
            if(x1*y2==y1*x2)
            {
                continue;
            }
            long long dx =x2*(x1*x1+y1*y1)-x1*(x2*x2+y2*y2);
            long long dy =y2*(x1*x1+y1*y1)-y1*(x2*x2+y2*y2);
            long long d = gcd(dx, dy);
            ++m[{dx / d, dy / d}];
        }
    }
    return res;
}
```

```
    }
    res = max(res, duplicate);
    map<pair<int,int>,int>::iterator it;
    for(it = m.begin(); it != m.end(); ++it)
    {
        res = max(res, it->second + duplicate);
    }
}
return res;
}

int main()
{
    int n;
    scanf("%d",&n);
    long long x,y;
    while(n--)
    {
        cin >> x >> y;
        points.push_back(make_pair(x,y));
    }
    cout << maxPoints() << endl;
    return 0 ;
}
```

后记：这种采用了反演的写法要考虑eps

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Last update: 2020/07/14 20:36