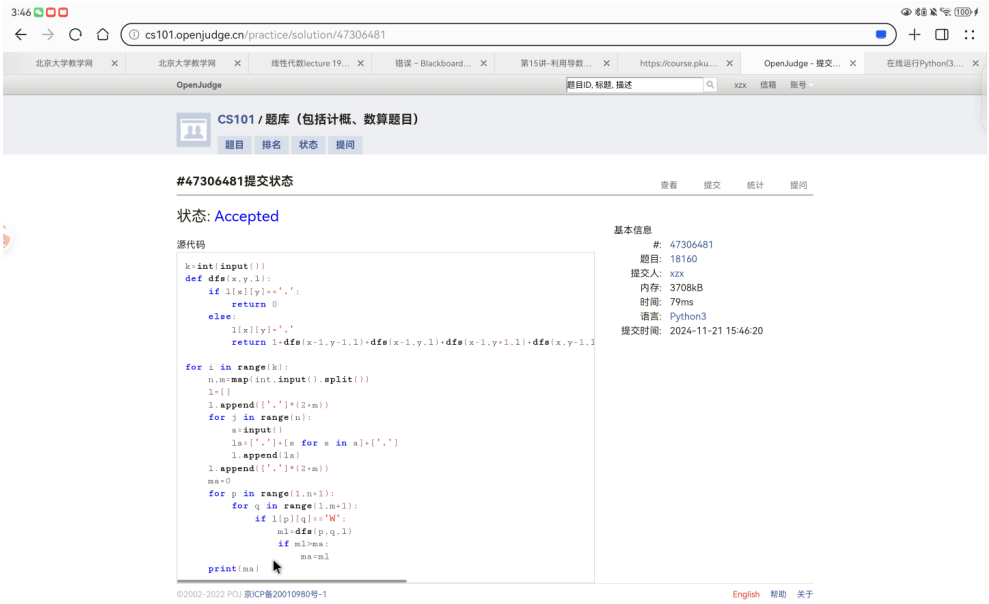
1. 题目
18160: 最大连通域面积
dfs similar, http://cs101.openjudge.cn/practice/18160

思路:

代码:
```
k=int(input())
def dfs(x,y,l):
    if l[x][y]=='.':
        return 0
    else:
        l[x][y]='.'
        return
1+dfs(x-1,y-1,l)+dfs(x-1,y,l)+dfs(x-1,y+1,l)+dfs(x,y-1,l)+dfs(x,y+1,l)+dfs(x+1,y-1,l)+dfs(
x+1,y,l)+dfs(x+1,y+1,l)

for i in range(k):
    n,m=map(int,input().split())
    l=[]
    l.append(['.']*(2+m))
    for j in range(n):
        a=input()
        la=['.']+[s for s in a]+['.']
        l.append(la)
    l.append(['.']*(2+m))
    ma=0
    for p in range(1,n+1):
        for q in range(1,m+1):
            if l[p][q]=='W':
                ml=dfs(p,q,l)
                if ml>ma:
                    ma=ml
    print(ma)
```
代码运行截图 （至少包含有"Accepted"）



19930: 寻宝
bfs, http://cs101.openjudge.cn/practice/19930

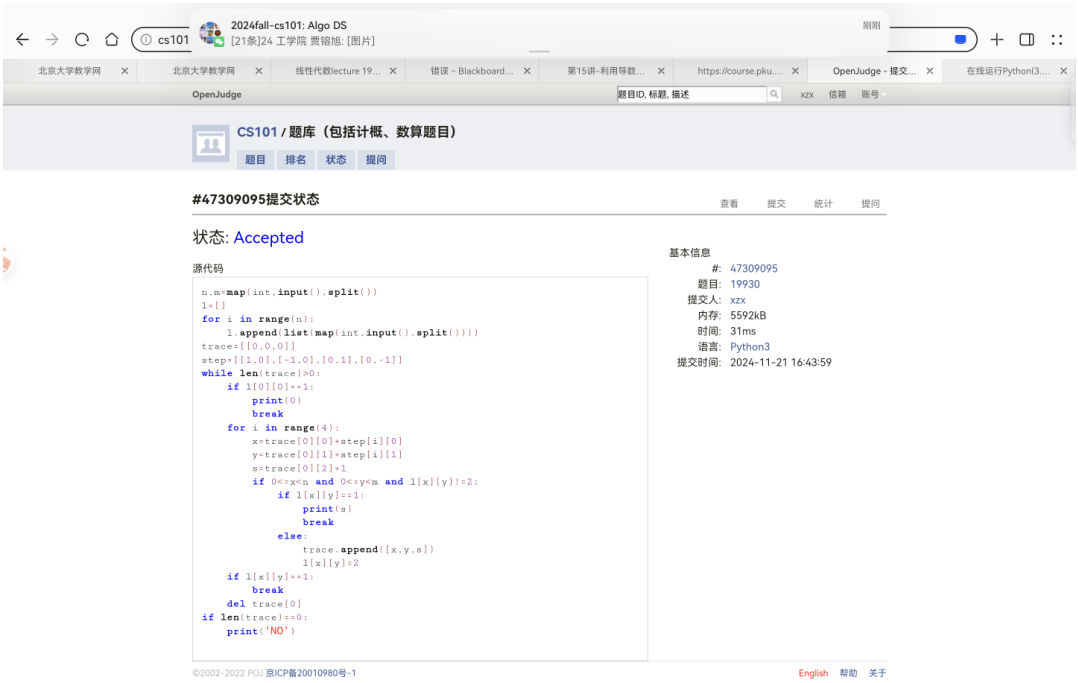
思路:

代码:

```
n,m=map(int,input().split())
l=[]
for i in range(n):
    l.append(list(map(int,input().split())))
trace=[[0,0,0]]
step=[[1,0],[-1,0],[0,1],[0,-1]]
while len(trace)>0:
    if l[0][0]==1:
        print(0)
        break
    for i in range(4):
        x=trace[0][0]+step[i][0]
        y=trace[0][1]+step[i][1]
        s=trace[0][2]+1
        if 0<=x<n and 0<=y<m and l[x][y]!=2:
            if l[x][y]==1:
                print(s)
                break
            else:
                trace.append([x,y,s])
                l[x][y]=2
    if l[x][y]==1:
```

```
            break
        del trace[0]
if len(trace)==0:
        print('NO')
```

代码运行截图 ==（至少包含有"Accepted"）==



04123: 马走日
dfs, http://cs101.openjudge.cn/practice/04123

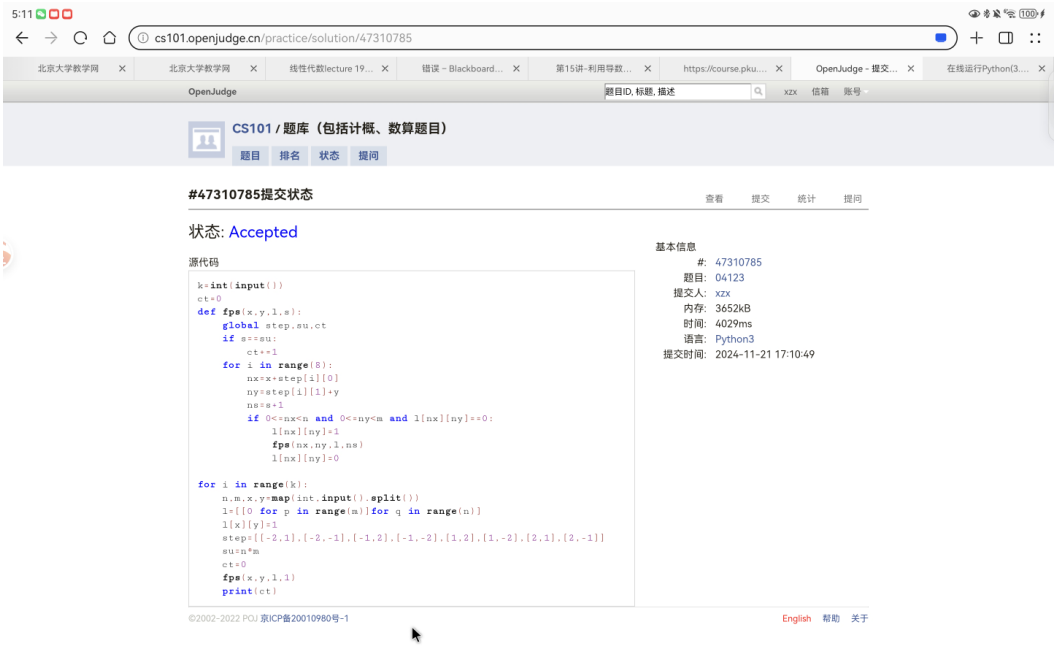
思路:

代码:

```
k=int(input())
ct=0
def fps(x,y,l,s):
        global step,su,ct
        if s==su:
                ct+=1
        for i in range(8):
                nx=x+step[i][0]
                ny=step[i][1]+y
                ns=s+1
                if 0<=nx<n and 0<=ny<m and l[nx][ny]==0:
                        l[nx][ny]=1
                        fps(nx,ny,l,ns)
                        l[nx][ny]=0
```

```
for i in range(k):
    n,m,x,y=map(int,input().split())
    l=[[0 for p in range(m)]for q in range(n)]
    l[x][y]=1
    step=[[-2,1],[-2,-1],[-1,2],[-1,-2],[1,2],[1,-2],[2,1],[2,-1]]
    su=n*m
    ct=0
    fps(x,y,l,1)
    print(ct)
```

代码运行截图 （至少包含有"Accepted"）



sy316: 矩阵最大权值路径
dfs, https://sunnywhy.com/sfbj/8/1/316

思路:

代码:

```
n,m=map(int,input().split())

l=[]

trace=[[0 for i in range(m)]for j in range(n)]

trace[0][0]=1

for i in range(n):
```

```
    l.append(list(map(int,input().split())))
step=[[1,0],[-1,0],[0,1],[0,-1]]
ms=0
mt=[]
for i in range(n-1):
    ms+=l[i][0]
    mt.append([i+1,1])
for j in range(m):
    mt.append([n,j+1])
ms+=sum(l[n-1])


def fps(x,y,s,t):
    global ms,step,mt
    if x==n-1 and y==m-1 and s>ms:
        ms=s
        mt=t
    for i in range(4):
        nx=x+step[i][0]
        ny=y+step[i][1]
        if 0<=nx<n and 0<=ny<m and trace[nx][ny]==0:
            ns=s+l[nx][ny]
            trace[nx][ny]=1
```

```
                nt=t+[[nx+1,ny+1]]

                fps(nx,ny,ns,nt)

                trace[nx][ny]=0

fps(0,0,l[0][0],[[1,1]])

for k in mt:

    print(k[0],k[1])
```

代码运行截图 （至少包含有"Accepted"）

LeetCode62.不同路径
dp, https://leetcode.cn/problems/unique-paths/

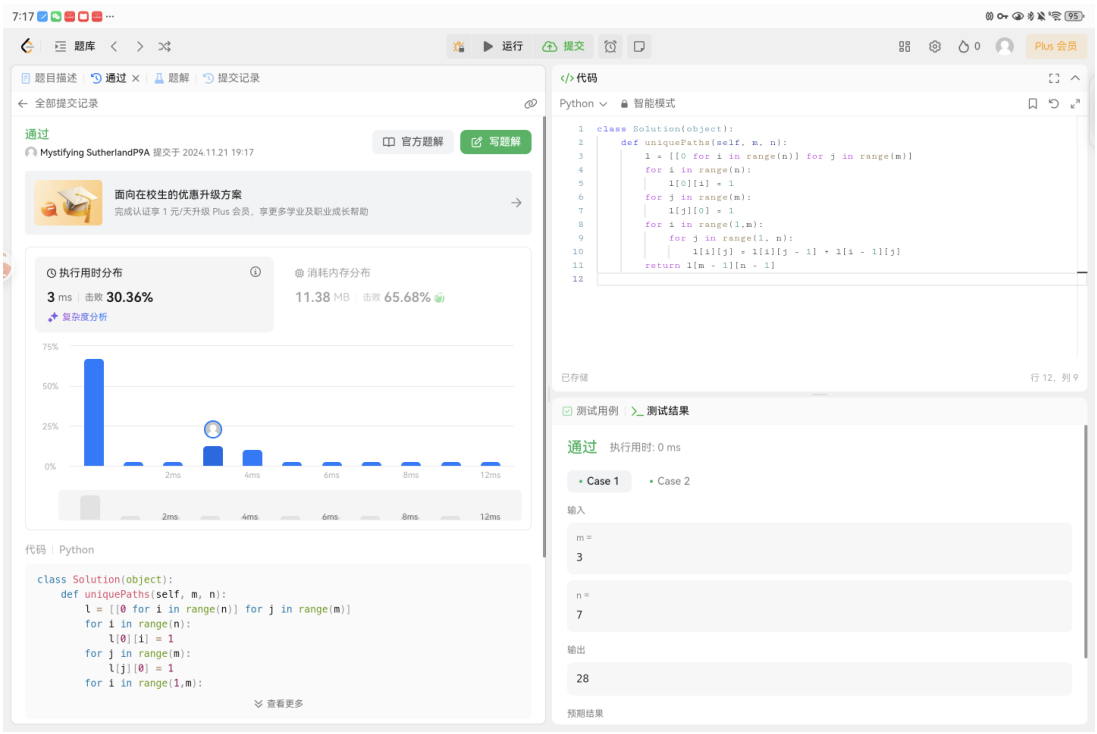
思路：

代码：

```
class Solution(object):

    def uniquePaths(self, m, n):

        l = [[0 for i in range(n)] for j in range(m)]

        for i in range(n):
```

```
                l[0][i] = 1

            for j in range(m):

                l[j][0] = 1

            for i in range(1,m):

                for j in range(1, n):

                    l[i][j] = l[i][j - 1] + l[i - 1][j]

            return l[m - 1][n - 1]
```

代码运行截图 （至少包含有"Accepted"）



sy358: 受到祝福的平方

dfs, dp, https://sunnywhy.com/sfbj/8/3/539

思路:

代码:

```
a=input()

fl=False

def bless(a,p):
```

```
    global fl
    if p==len(a):
        fl=True
    for i in range(p+1,len(a)+1):
        s=int(a[p:i])
        if int(s**0.5)==s**0.5 and s>0:
            bless(a,i)
bless(a,0)
if fl:
    print('Yes')
else:
    print('No')
```

代码运行截图 （至少包含有"Accepted"）

2. 学习总结和收获

本次作业题比较简单，因为 dfs 和 bfs 的题目思路上很相似，基本是一题通，题题通，所以做起来比较快。

如果作业题目简单，有否额外练习题目，比如：OJ“计概 2024fall 每日选做”、CF、LeetCode、洛谷等网站题目。
日常跟进 OJ 每日选做