

## 1. 题目

LuoguP1255 数楼梯

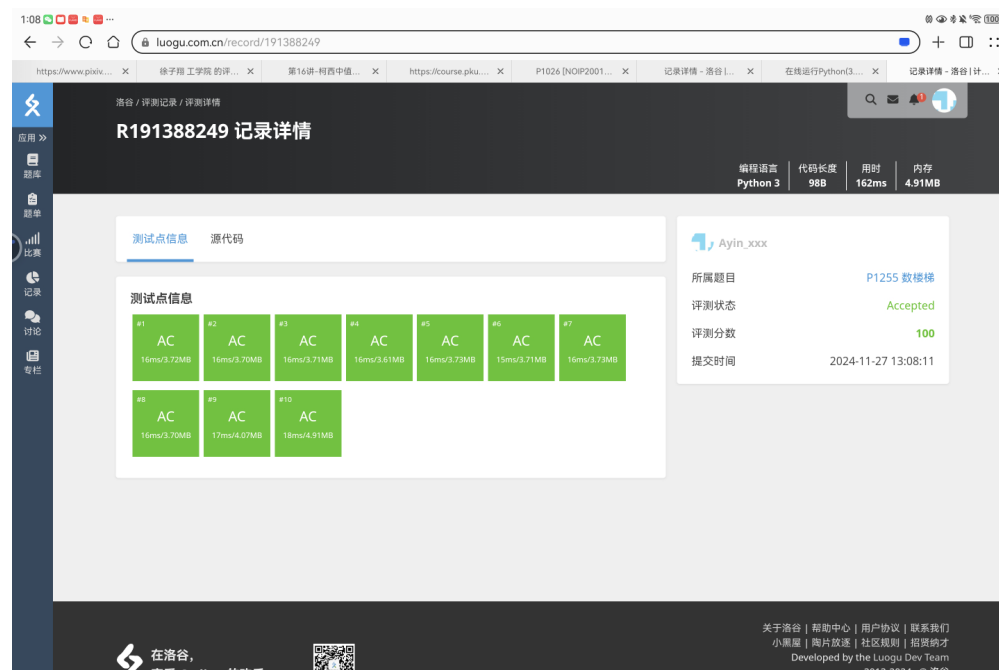
dp, bfs, <https://www.luogu.com.cn/problem/P1255>

思路:

代码:

```
n=int(input())
l=[0]*(n+3)
l[0]=1
l[1]=2
for i in range(2,n):
    l[i]=l[i-1]+l[i-2]
print(l[n-1])
```

代码运行截图（至少包含有"Accepted"）



27528: 跳台阶

dp, <http://cs101.openjudge.cn/practice/27528/>

思路:

代码:

```
n=int(input())
l=[1]*(n+3)
for i in range(1,n):
    for j in range(i):
        l[i]+=l[j]
print(l[n-1])
```

代码运行截图 ==（至少包含有"Accepted"）==



474D. Flowers

dp, <https://codeforces.com/problemset/problem/474/D>

思路:

代码:

```
t,k=map(int,input().split())
l=[0 for i in range(100005)]
su=[0 for i in range(100005)]
p=k-1
for j in range(k):
    l[j]=1
    su[j]=j+1
for j in range(k,100003):
    l[j]=(l[j-1]+l[j-k])%1000000007
    su[j]=(l[j]+su[j-1])%1000000007
for i in range(t):
    a,b=map(int,input().split())
    print((su[b]-su[a-1])%1000000007)
```

代码运行截图 （至少包含有"Accepted"）

#	When	Who	Problem	Lang	Verdict	Time	Memory
293446815	Nov/27/2024 14:06 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Accepted	640 ms	8800 KB
293446125	Nov/27/2024 13:51 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Memory limit exceeded on test 31	1078 ms	262100 KB
293444952	Nov/27/2024 13:49 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Wrong answer on test 3	108 ms	6700 KB
293443831	Nov/27/2024 13:39 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Time limit exceeded on test 3	1500 ms	3300 KB
293443285	Nov/27/2024 13:34 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Time limit exceeded on test 3	1500 ms	3300 KB
293442791	Nov/27/2024 13:30 <sup>ms</sup>	XZKXZX	674D - Flowers	Python 3	Runtime error on test 2	61 ms	0 KB
291424440	Nov/14/2024 17:36 <sup>ms</sup>	XZKXZX	455A - Boredom	Python 3	Accepted	202 ms	13000 KB
291423946	Nov/14/2024 17:32 <sup>ms</sup>	XZKXZX	455A - Boredom	Python 3	Runtime error on test 43	233 ms	12900 KB
289095295	Nov/01/2024 14:19 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Accepted	77 ms	0 KB
289095026	Nov/01/2024 14:12 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Wrong answer on test 10	77 ms	0 KB
289094861	Nov/01/2024 14:11 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Wrong answer on test 10	77 ms	0 KB
289094621	Nov/01/2024 14:06 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Runtime error on test 13	93 ms	0 KB
289094261	Nov/01/2024 14:04 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Runtime error on test 1	46 ms	0 KB
288696630	Oct/28/2024 16:53 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Runtime error on test 5	62 ms	500 KB
288695800	Oct/28/2024 16:48 <sup>ms</sup>	XZKXZX	189A - Cut Ribbon	Python 3	Wrong answer on test 2	62 ms	0 KB
287329612	Oct/22/2024 17:00 <sup>ms</sup>	XZKXZX	545C - Woodcutters	Python 3	Accepted	405 ms	19100 KB
287329406	Oct/22/2024 16:59 <sup>ms</sup>	XZKXZX	545C - Woodcutters	Python 3	Wrong answer on test 9	343 ms	18900 KB
286019323	Oct/15/2024 17:19 <sup>ms</sup>	XZKXZX	230B - T-primes	Python 3	Accepted	1812 ms	14900 KB

LeetCode5.最长回文子串

dp, two pointers, string, <https://leetcode.cn/problems/longest-palindromic-substring/>

思路:

代码:

class Solution(object):

def longestPalindrome(self, s):

ms=s[0]

for i in range(1,len(s)-1):

k=1

while i-k>-1 and i+k<len(s) and s[i-k]==s[i+k]:

k+=1

k-=1

if 2\*k+1>len(ms):

ms=s[i-k:i+k+1]

for i in range(len(s)-1):

```
if s[i]==s[i+1]:
```

```
    k=1
```

```
    while i-k>-1 and i+k+1<len(s) and s[i-k]==s[i+1+k]:
```

```
        k+=1
```

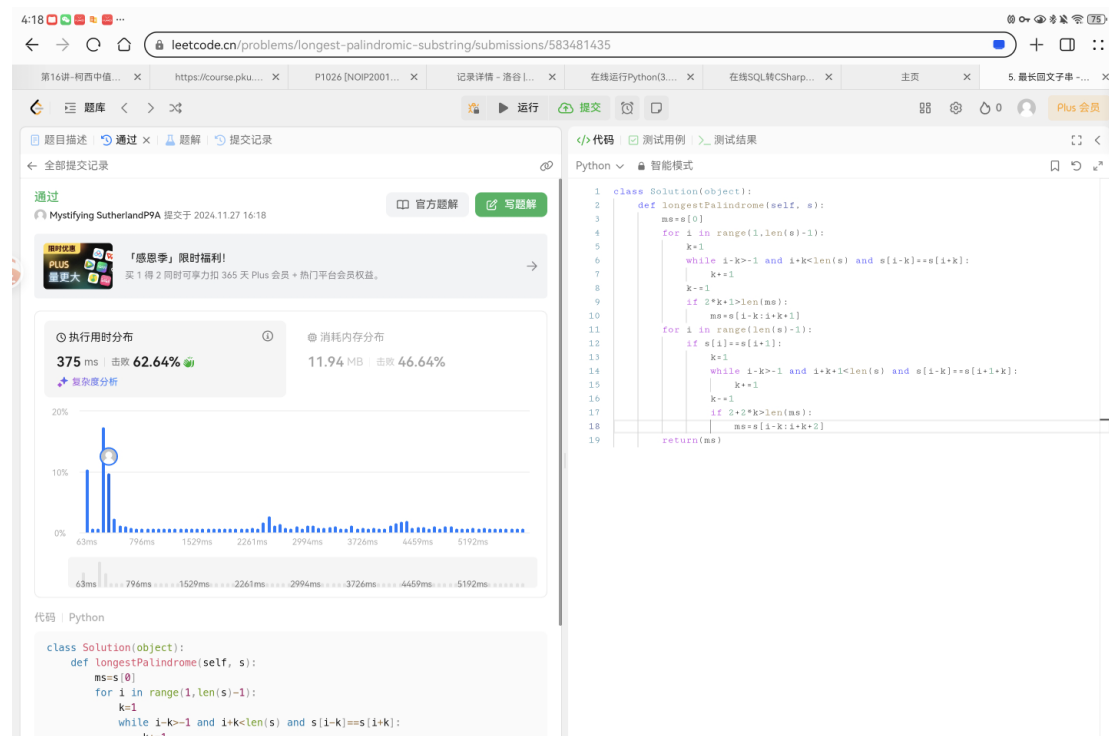
```
    k-=1
```

```
    if 2+2*k>len(ms):
```

```
        ms=s[i-k:i+k+2]
```

```
return(ms)
```

代码运行截图（至少包含有"Accepted"）



12029: 水淹七军

bfs, dfs, <http://cs101.openjudge.cn/practice/12029/>

思路:

代码:

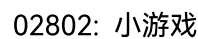
```
import sys
sys.setrecursionlimit(300000)
data=sys.stdin.read()
```

```

lines=data.split()
def dfs(l,x,y):
    global step
    for k in step:
        nx=x+k[0]
        ny=y+k[1]
        if 0<=nx<m and 0<=ny<n and l[nx][ny]<l[x][y]:
            l[nx][ny]=l[x][y]
            dfs(l,nx,ny)
k=int(lines[0])
step=[[0,1],[0,-1],[1,0],[-1,0]]
result=[]
p=0
for h in range(k):
    p+=1
    m=int(lines[p])
    p+=1
    n=int(lines[p])
    l=[]
    for i in range(m):
        li=[]
        for j in range(n):
            p+=1
            li.append(int(lines[p]))
        l.append(li)
    p+=1
    slx=int(lines[p])
    p+=1
    sly=int(lines[p])
    slx-=1
    sly-=1
    sl=l[slx][sly]
    p+=1
    g=int(lines[p])
    for i in range(g):
        p+=1
        a0=int(lines[p])
        p+=1
        a1=int(lines[p])
        dfs(l,a0-1,a1-1)
    if sl!=l[slx][sly]:
        result.append('Yes')
    else:
        result.append('No')

```

代码运行截图（至少包含有"Accepted"）



思路:

```
w,h=map(int,input().split())
```

 $n=0$  $n+=1$ 

```
print('Board #' + str(n) + ':')
```

```
l=[[' ' for i in range(w+2)]]
```

```
for j in range(h):
```

```
a=input()
```

```
l.append([' ']+[k for k in a]+[' '])
```

```
l.append([' 'for i in range(w+2)])
```

```
x1,y1,x2,y2=map(int,input().split())
```

 $m=0$ 

```
while x1!=0:
```

$$m+=1$$

op=0

$$n! = \prod$$

```
for k in range(h+2):
```

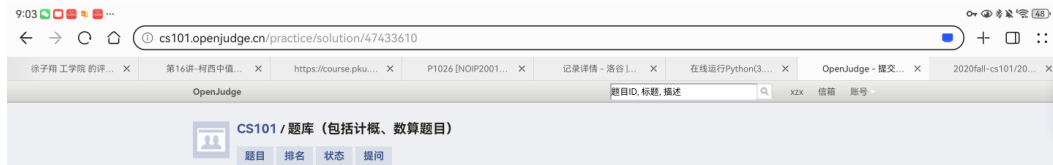
$$n|k=\lceil$$

```

        for j in range(w+2):
            nlk.append(l[k][j])
        nl.append(nlk)
    sub=[[x1,y1,0]]
    fl=True
    while len(sub)!=0 and fl:
        x=sub[0][0]
        y=sub[0][1]
        s=sub[0][2]
        for k in step:
            if fl:
                nx=x+k[0]
                ny=y+k[1]
                ns=s+1
                if nx==x2 and ny==y2:
                    op=ns
                    fl=False
                while 0<=nx<w+2 and 0<=ny<h+2 and nl[ny][nx]==' ' and fl:
                    sub.append([nx,ny,ns])
                    nl[ny][nx]='X'
                    nx+=k[0]
                    ny+=k[1]
                    if nx==x2 and ny==y2:
                        op=ns
                        fl=False
            del sub[0]
        if fl:
            print('Pair '+str(m)+': impossible.')
        else:
            print('Pair '+str(m)+': '+str(op)+' segments.')
    x1,y1,x2,y2=map(int,input().split())
    print()
    w,h=map(int,input().split())

```

代码运行截图 （至少包含有"Accepted"）



#47433610提交状态

查看 提交 统计 提问

状态: Accepted

源代码

```
w,h=map(int,input().split())
step=[(1,0),(-1,0),(0,1),(0,-1)]
n=0
while h!=0:
    n+=1
    print('Board #'+str(n)+':')
    l=[[' ' for i in range(w+2)]]
    for j in range(h):
        a=input()
        l.append([' ']+[k for k in a]+' '])
    l.append([' ' for i in range(w+2)])
    x1,y1,x2,y2=map(int,input().split())
    m=0
    while x1!=0:
        m+=1
        op=0
        nl=[]
        for k in range(h+2):
            nlk=[]
            for j in range(w+2):
                nlk.append(l[k][j])
            nl.append(nlk)
        sub=[[x1,y1,0]]
        fl=True
        while len(sub)!=0 and fl:
            x=sub[0][0]
            y=sub[0][1]
            s=sub[0][2]
            for k in step:
                if fl:
                    nx=x+k[0]
                    ny=y+k[1]
```

基本信息

#: 47433610  
题目: 02802  
提交人: xzx  
内存: 3796kB  
时间: 67ms  
语言: Python3  
提交时间: 2024-11-27 21:03:32

## 2. 学习总结和收获

水淹七军的 RE 真的卡了好久，说明对 sys 读入还不熟悉，还需多练。对 dfs, bfs 等更加熟悉，做题快了很多。

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 选做