

## 1. 题目

### 12558: 岛屿周长

matrices, <http://cs101.openjudge.cn/practice/12558/>

代码:

```
n,m=map(int,input().split())
k=0
sl=[]
for _ in range(n):
    sl.append(list(map(int,input().split())))
for i in range(n):
    for j in range(m):
        if sl[i][j]==1:
            k+=4
            if i<n-1 and sl[i+1][j]==1:
                k-=2
            if j<m-1 and sl[i][j+1]==1:
                k-=2
print(k)
```

代码运行截图（至少包含有"Accepted"）

状态: **Accepted**

源代码

```
n,m=map(int,input().split())
k=0
sl=[]
for _ in range(n):
    sl.append(list(map(int,input().split())))
for i in range(n):
    for j in range(m):
        if sl[i][j]==1:
```

基本信息

#: 47269433  
题目: 12558  
提交人: misty  
内存: 3664kB  
时间: 34ms  
语言: Python3  
提交时间: 2024-11-19 19:44:27

### LeetCode54.螺旋矩阵

matrice, <https://leetcode.cn/problems/spiral-matrix/>

与 OJ 这个题目一样的

18106: 螺旋矩阵, <http://cs101.openjudge.cn/practice/18106>

代码:

```
n = int(input())
matrix = [[0] * n for _ in range(n)]
num = 1
left, right, top, bottom = 0, n - 1, 0, n - 1
```

```
while num <= n * n:
    for i in range(left, right + 1):
        matrix[top][i] = num
```

```

        num += 1
    top += 1
    for i in range(top, bottom + 1):
        matrix[i][right] = num
        num += 1
    right -= 1
    for i in range(right, left - 1, -1):
        matrix[bottom][i] = num
        num += 1
    bottom -= 1
    for i in range(bottom, top - 1, -1):
        matrix[i][left] = num
        num += 1
    left += 1

for row in matrix:
    for num in row:
        print(num, end=' ')
    print()

```

代码运行截图 ==（至少包含有"Accepted"）==

状态: **Accepted**

源代码

```

n = int(input())
matrix = [[0] * n for _ in range(n)]
num = 1
left, right, top, bottom = 0, n - 1, 0, n - 1

while num <= n * n:
    for i in range(left, right + 1):

```

基本信息

#: 47269950  
 题目: 18106  
 提交人: misty  
 内存: 3676kB  
 时间: 27ms  
 语言: Python3  
 提交时间: 2024-11-19 20:06:36

## 04133:垃圾炸弹

matrices, <http://cs101.openjudge.cn/practice/04133/>

代码:

```

d = int(input())
n = int(input())
board = [[0] * 1025 for _ in range(1025)]
for _ in range(n):
    x, y, k = map(int, input().split())
    for i in range(max(0, x - d), min(1025, x + d + 1)):
        for j in range(max(0, y - d), min(1025, y + d + 1)):
            board[i][j] += k
maxk = max(max(l) for l in board)
num = sum(l.count(maxk) for l in board)
print(num, maxk)

```

代码运行截图 （至少包含有"Accepted"）

状态: Accepted

源代码

```
d = int(input())
n = int(input())
board = [[0] * 1025 for _ in range(1025)]
for _ in range(n):
    x, y, k = map(int, input().split())
    for i in range(max(0, x - d), min(1025, x + d + 1)):
```

基本信息

#: 47271008  
题目: 04133  
提交人: misty  
内存: 11900kB  
时间: 67ms  
语言: Python3  
提交时间: 2024-11-19 20:48:10

## LeetCode376.摆动序列

greedy, dp, <https://leetcode.cn/problems/wiggle-subsequence/>

与 OJ 这个题目一样的, 26976:摆动序列, <http://cs101.openjudge.cn/routine/26976/>

代码:

```
def sgn(x):
```

```
    if x == 0:
        return 0
    elif x > 0:
        return 1
    elif x < 0:
        return -1
```

```
n = int(input())
nums = list(map(int, input().split()))
delta = [sgn(nums[i+1]-nums[i]) for i in range(n-1)]
```

```
result = 1
pre = 0
for i in range(n-1):
    if delta[i] * pre < 0 or (pre == 0 and delta[i] != 0):
        result += 1
    pre = delta[i]
print(result)
```

代码运行截图 （至少包含有"Accepted"）

状态: Accepted

源代码

```
def sgn(x):
    if x == 0:
        return 0
    elif x > 0:
        return 1
    elif x < 0:
        return -1
```

基本信息

#: 47271379  
题目: 26976  
提交人: misty  
内存: 3692kB  
时间: 28ms  
语言: Python3  
提交时间: 2024-11-19 21:03:38

## CF455A: Boredom

dp, 1500, <https://codeforces.com/contest/455/problem/A>

代码:

```
n,m=map(int,input().split())
k=0
sl=[]
for _ in range(n):
    sl.append(list(map(int,input().split())))
for i in range(n):
    for j in range(m):
        if sl[i][j]==1:
            k+=4
            if i<n-1 and sl[i+1][j]==1:
                k-=2
            if j<m-1 and sl[i][j+1]==1:
                k-=2
print(k)
```

代码运行截图 （至少包含有"Accepted"）

My Submissions							
#	When	Who	Problem	Lang	Verdict	Time	Memory
<a href="#">292333978</a>	Nov/19/2024 21:19 <sup>UTC+8</sup>	mistyshen	<a href="#">A - Boredom</a>	Python 3	Accepted	186 ms	13100 KB

## 02287: Tian Ji -- The Horse Racing

greedy, dfs <http://cs101.openjudge.cn/practice/02287>

代码:

```
from bisect import bisect_left
while True:
    n = int(input())
    if n == 0:
        break
    tians = [int(x) for x in input().split()]
    kings = [int(x) for x in input().split()]
    tians.sort()
    kings.sort()
    ties = []
    count = 0
    for p1head in range(n):
        a = bisect_left(kings,tians[p1head])
        if a:
            count += 1
            kings.pop(a-1)
        else:
            ties.append(tians[p1head])
```

```
p2 = 0
for i in range(len(ties)):
    if ties[i] < kings[p2]:
        count -= 1
    else:
        p2 += 1
```

```
print(count*200)
```

代码运行截图 （至少包含有"Accepted"）

状态: **Accepted**

源代码

```
from bisect import bisect_left
while True:
    n = int(input())
    if n == 0:
        break
    tians = [int(x) for x in input().split()]
    kings = [int(x) for x in input().split()]
    tians.sort()
    kings.sort()
```

基本信息

#: 47271935  
题目: 02287  
提交人: misty  
内存: 4120kB  
时间: 75ms  
语言: Python3  
提交时间: 2024-11-19 21:31:25

## 2. 学习总结和收获

（1）期中之后开始补算法部分的知识了，这次作业除了最后两个题都没有遇到太大困难，后面还需要学习 dp 和之前见过的背包问题。

（2）现在每天补做一些之前发布的练习题，感叹每天攒下来的东西居然有这么多