Assignment #2: 语法练习

2024 fall, Complied by ==物理学院24本吴诚舟==

1. 题目

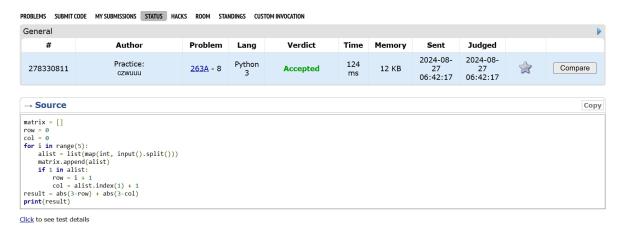
263A. Beautiful Matrix

https://codeforces.com/problemset/problem/263/A

代码

```
matrix = []
row = 0
col = 0
for i in range(5):
    alist = list(map(int, input().split()))
    matrix.append(alist)
    if 1 in alist:
        row = i + 1
        col = alist.index(1) + 1
result = abs(3-row) + abs(3-col)
print(result)
```

代码运行截图 == (至少包含有"Accepted") ==



1328A. Divisibility Problem

https://codeforces.com/problemset/problem/1328/A

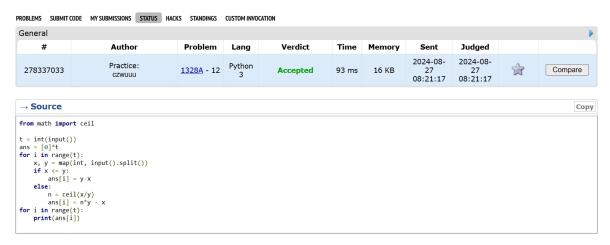
代码

```
from math import ceil

t = int(input())
ans = [0]*t
for i in range(t):
```

```
x, y = map(int, input().split())
if x <= y:
    ans[i] = y-x
else:
    n = ceil(x/y)
    ans[i] = n*y - x
for i in range(t):
    print(ans[i])</pre>
```

代码运行截图 == (至少包含有"Accepted") ==

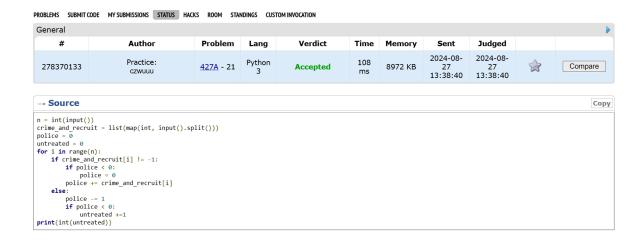


427A. Police Recruits

https://codeforces.com/problemset/problem/427/A

代码

```
n = int(input())
crime_and_recruit = list(map(int, input().split()))
police = 0
untreated = 0
for i in range(n):
    if crime_and_recruit[i] != -1:
        if police < 0:
            police = 0
        police += crime_and_recruit[i]
    else:
        police -= 1
        if police < 0:
            untreated +=1
print(int(untreated))</pre>
```



02808: 校门外的树

http://cs101.openjudge.cn/practice/02808/

代码

```
L, M = map(int, input().split())
trees = [1]*(L+1)
for _ in range(M):
    start, end = map(int, input().split())
    trees[start:end+1] = [0]*(end-start+1)
result = sum(trees)
print(result)
```

代码运行截图 == (AC代码截图,至少包含有"Accepted") ==

```
#46004291提交状态
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              查看
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 提交
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         统计
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        提问
状态: Accepted
源代码
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #: 46004291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         题目: 02808
       L, M = map(int, input().split())
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               提交人: wcz
        trees = [1]*(L+1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       内存: 3792kB
         \begin{tabular}{ll} \be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       时间: 22ms
                            start, end = map(int, input().split())
                              trees[start:end+1] = [0]*(end-start+1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       语言: Python3
       result = sum(trees)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    提交时间: 2024-09-05 09:28:55
       print(result)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        English 帮助 关于
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```

sy60: 水仙花数II

https://sunnywhy.com/sfbj/3/1/60

代码

```
def check(n):
    a = n // 100
    b = (n-a*100) // 10
    c = n - a*100 - b*10
    res = a**3 + b**3 + c**3
```

```
if res == n:
    return True
else:
    return False

a, b = map(int, input().split())
ans = []
for n in range(a, b+1):
    if check(n):
        ans.append(n)

if ans:
    print(' '.join(map(str, ans)))
else:
    print('NO')
```

代码运行截图 == (AC代码截图,至少包含有"Accepted") ==



01922: Ride to School

http://cs101.openjudge.cn/practice/01922/

代码

```
from math import ceil
answers = []
while True:
    N = int(input())
    if N == 0:
        break
    else:
        ans = float('inf')
        for i in range(N):
            v, t = map(int, input().split())
            if t >= 0:
                arrival_t = ceil(t + 4.5*3600/v)
                if arrival_t < ans:</pre>
                     ans = arrival_t
        answers.append(ans)
for i in range(len(answers)):
    print(answers[i])
```

代码运行截图 == (AC代码截图,至少包含有"Accepted") ==

```
#46191495提交状态
                                                                               查看
                                                                                              统计
                                                                                                     提问
状态: Accepted
                                                                        基本信息
源代码
                                                                             #: 46191495
                                                                           题目: 01922
 from math import ceil
                                                                          提交人: wcz
                                                                           内存: 3572kB
 answers = []
                                                                           时间: 40ms
 while True:
    N = int(input())
                                                                            语言: Python3
    if N == 0:
                                                                         提交时间: 2024-09-24 18:33:09
        break
     else:
        ans = float('inf')
        for i in range(N):
            v, t = map(int, input().split())
            if t >= 0:
               arrival_t = ceil(t + 4.5*3600/v)
               if arrival_t < ans:</pre>
                   ans = arrival_t
        answers.append(ans)
 for i in range(len(answers)):
    print(answers[i])
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                                                                                           English 帮助 关于
```

2. 学习总结和收获

普遍比较简单。但是最后一道题有收获。一个是知道了无穷大的表示方法。还有其实一开始没想出怎么做(没想到只要比较每个rider到达时间就行),后来看了课程群里同学的代码才恍然大悟。

每日选做在跟进 (p.s. 难度E是Easy吗 (doge