Assignment #2：语法练习

1. 题目

263A. Beautiful Matrix

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

代码：

```
for i in range(5):
    a = input().split()
    if "1" in a:
        print(abs(i-2) + abs(a.index("1")-2))
        break
```

截图：

```
for i in range(5):
    s = input().split()
    if "1" in s:
        print(abs(i-2)+abs(s.index("1")-2))
        break
```

→**Judgement Protocol**

1328A. Divisibility Problem

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

代码：

```
n = int(input())
for i in range(n):
    a,b = map(int,input().split())
    output = a % b
    if output == 0:
        print(0)
    else:
        print(b - output)
```

截图：

```
n = int(input())
for i in range(n):
    a, b = map(int, input().split())
    output = a % b
    if output == 0:
        print(0)
    else:
        print(b - output)
```

427A. Police Recruits

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

代码：

n = int(input())a = list(map(int, input().split()))cnt = 0officers = 0for i in a:

```
        if i == -1 and officers == 0:
            cnt += 1
            continue
        if i > 0:
            officers += i
            continue
        officers -= 1
print(cnt)
```

截图：

```
n = int(input())
a = list(map(int, input().split()))
cnt = 0
officers = 0
for i in a:
    if i == -1 and officers==0:
        cnt += 1
        continue
    if i > 0:
        officers += i
        continue
    officers -= 1

print(cnt)
```

02808: 校门外的树

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

代码：

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

dp = [1]*(L+1)

for i in range(m):
    s, e = map(int, input().split())
    for j in range(s, e+1):
        dp[j] = 0

print(dp.count(1))
```

截图：

状态: Accepted

源代码

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

dp = [1]*(L+1)

for i in range(m):
    s, e = map(int, input().split())
    for j in range(s, e+1):
        dp[j] = 0

print(dp.count(1))
```

基本信息

#:	46329326
题目:	02808
提交人:	misty
内存:	3668kB
时间:	49ms
语言:	Python3
提交时间:	2024-10-06 16:46:39

sy60: 水仙花数 II

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

代码：

```
def find_narcissistic_numbers(a, b):
    result = []

    for n in range(a, b + 1):
        hundreds = n // 100
        tens = (n % 100) // 10
        units = n % 10

        if hundreds**3 + tens**3 + units**3 == n:
            result.append(n)

    if result:
        print(" ".join(map(str, result)))
    else:
        print("NO")


a, b = map(int, input().split())
find_narcissistic_numbers(a, b)
```

截图：

01922: Ride to School

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

代码：

```
import math

while True:
    n = int(input())
    if n == 0:
        break

    max_time = float("inf")
    for _ in range(n):
        speed, time = map(int, input().split())
        if time < 0:
```

```
            continue
        arrival_time = math.ceil((4500 / speed) * 3.6 + time)
        max_time = min(max_time, arrival_time)


    print(max_time)
```

截图：

2. 学习总结和收获

1. 第一次见到动态规划
2. 涉及到很多数字计算，注意到做题时运算符号容易写错
3. 题目感觉比上次难，但是难度提升不大，这样的节奏还可以接受