

Assignment #2: 语法练习

Updated 0126 GMT+8 Sep 24, 2024

2024 fall, Compiled by ==曾弘倓 物理学院 2400011513==

1. 题目

263A. Beautiful Matrix

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

思路：

代码

```
beautiful_matrix=[]
for i in range(5):
    bm=list(map(int,input().split()))
    beautiful_matrix.append(bm)

for i in range(5):
    for j in range(5):
        if beautiful_matrix[i][j]==1:
            print(abs(i-2)+abs(j-2))
```

代码运行截图 ====

PROBLEMS

SUBMIT CODE

MY SUBMISSIONS

STATUS

HACKS

ROOM

STANDINGS

CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
282786015	Practice: xieyixu	263A - 8	Python 3	Accepted	216 ms	16 KB	2024-09-24 17:08:05	2024-09-24 17:08:05	★	Compare

→ Source

```
beautiful_matrix=[]
for i in range(5):
    bm=list(map(int,input().split()))
    beautiful_matrix.append(bm)

for i in range(5):
    for j in range(5):
        if beautiful_matrix[i][j]==1:
            print(abs(i-2)+abs(j-2))
```

Copy

[Click to see test details](#)

1328A. Divisibility Problem

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

思路：

代码

```
n=int(input())
numbers=[]
for i in range(n):
    a=list(map(int,input().split()))
    numbers.append(a)
for i in range(n):
    a,b=numbers[i][0],numbers[i][1]
    if a%b!=0:
        print(b-(a%b))
    elif a%b==0:
        print(0)
```

代码运行截图 ====

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
282862257	Practice: xieyixu	1328A - 12	Python 3	Accepted	109 ms	1404 KB	2024-09-25 08:28:06	2024-09-25 08:28:06	★	<button>Compare</button>

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```
n=int(input())
numbers=[]
for i in range(n):
    a=list(map(int,input().split()))
    numbers.append(a)
for i in range(n):
    a,b=numbers[i][0],numbers[i][1]
    if a%b!=0:
        print(b-(a%b))
    elif a%b==0:
        print(0)
```

[Click](#) to see test details

427A. Police Recruits

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

思路：

代码

```
n=int(input())
numbers=list(map(int,input().split()))
s=0
t=0
for i in range(n):
    if s>0:
        if numbers[i]<0:
            s=s+numbers[i]
        else:
            s=s+numbers[i]
    elif s<=0:
```

```

    if numbers[i]>0:
        s=s+numbers[i]
    else:
        s=s
        t=t+1
print(t)

```

代码运行截图 ====

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
282870444	Practice: xieyixu	427A - 21	Python 3	Accepted	93 ms	9716 KB	2024-09-25 09:59:24	2024-09-25 09:59:24	☆	Compare

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```

n=int(input())
numbers=list(map(int,input().split()))
s=0
t=0
for i in range(n):
    if s>0:
        if numbers[i]<0:
            s=s-numbers[i]
        else:
            s=s+numbers[i]
    elif s<=0:
        if numbers[i]>0:
            s=s+numbers[i]
        else:
            s=s
            t=t+1
print(t)

```

[Click](#) to see test details

02808: 校门外的树

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

思路：

代码

```

def count_remaining_trees(L, M, regions):
    removed = [False] * (L + 1)
    for start, end in regions:
        for i in range(start, end + 1):
            removed[i] = True
    return sum(1 for is_removed in removed if not is_removed)

L, M = map(int, input().split())
regions = [tuple(map(int, input().split())) for _ in range(M)]

remaining_trees = count_remaining_trees(L, M, regions)
print(remaining_trees)

```

代码运行截图 ====

状态: Accepted

源代码

```
def count_remaining_trees(L, M, regions):
    removed = [False] * (L + 1)
    for start, end in regions:
        for i in range(start, end + 1):
            removed[i] = True
    return sum(1 for is_removed in removed if not is_removed)

L, M = map(int, input().split())
regions = [tuple(map(int, input().split())) for _ in range(M)]

remaining_trees = count_remaining_trees(L, M, regions)
print(remaining_trees)
```

基本信息

#: 46035424
题目: 02808
提交人: xieyixu
内存: 7432kB
时间: 34ms
语言: Python3
提交时间: 2024-09-09 19:35:12

sy60: 水仙花数II

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

思路:

代码

```
def narcissus(n):
    numbers=[int(d) for d in str(n)]
    s=sum(number**3 for number in numbers)
    if s==n:
        return True

a,b=map(int,input().split())
j=0
numbers=[]
for i in range(a,b+1):
    if narcissus(i):
        numbers.append(i)
        j+=1
if j!=0:
    print(' '.join(map(str,numbers)))
elif j==0:
    print("NO")
```

代码运行截图 ====

```
1 def narcissus(n):
2     numbers=[int(d) for d in str(n)]
3     s=sum(number**3 for number in numbers)
4     if s==n:
5         return True
6
7 a,b=map(int,input().split())
8 j=0
9 numbers=[]
10 for i in range(a,b+1):
11     if narcissus(i):
12         numbers.append(i)
13         j+=1
14 if j!=0:
15     print(' '.join(map(str,numbers)))
16 elif j==0:
17     print("NO")
```

测试输入

历史提交

提交时间	结果	时长(ms)	语言
------	----	--------	----

2024-09-23 15:44:22

完美通过

0

Python

[查看](#)[收起面板](#)

运行



提交

01922: Ride to School

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

思路：

代码

```
import math
t=[]
while True:
    n=int(input())
    if n!=0:
        students=[]
        for i in range(n):
            student=list(map(int,input().split()))
            students.append(student)
        times=[]
        for i in range(n):
            if students[i][1]>=0:
                time=students[i][1]+math.ceil((4.5/(students[i][0]))*3600)
                times.append(time)
            t.append(min(times))
        if n==0:
            break

for time in t:
    print(time)
```

代码运行截图 ====

#46202726提交状态

查看 提交 统计 提问

状态: Accepted

源代码

```
import math
t=[]
while True:
    n=int(input())
    if n!=0:
        students=[]
        for i in range(n):
            student=list(map(int,input().split()))
            students.append(student)
        times=[]
        for i in range(n):
            if students[i][1]>=0:
                time=students[i][1]+math.ceil((4.5/(students[i][0]))*3600)
                times.append(time)
            t.append(min(times))
        if n==0:
            break

for time in t:
    print(time)
```

基本信息

#: 46202726

题目: 01922

提交人: xieyixu

内存: 5172kB

时间: 49ms

语言: Python3

提交时间: 2024-09-25 15:54:54

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English 帮助 关于

2. 学习总结和收获

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熟悉了python的语法。学到了很多编程知识。每日选作基本上都在做。

