1. 题目

E05344:最后的最后 http://cs101.openjudge.cn/practice/05344/

思路:

```
代码:
n,k=map(int,input().split())
l=[i for i in range(1,n+1)]
s="
for i in range(n-1):
    for j in range(k-1):
        l.append(I[0])
        del I[0]
        s+=str(I[0])+''
        del I[0]
print(s[:-1])
代码运行截图 (至少包含有"Accepted")
```



M02774: 木材加工

binary search, http://cs101.openjudge.cn/practice/02774/

思路:

代码:

n,k=map(int,input().split())

wood=[]

```
for i in range(n):
                        wood.append(int(input()))
l=sum(wood)//k
i=1
j=l
if j<1:
                        print(0)
elif j==1:
                        print(1)
else:
                        op=0
                        while i<=j:
                                              m=(i+j)//2
                                              ct=0
                                              for p in range(n):
                                                                    ct+=wood[p]//m
                                              if ct<k:
                                                                   j=m-1
                                              else:
                                                                    i=m+1
                                                                     op=m
                        print(op)
 代码运行截图 (至少包含有"Accepted")
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#8798629

#BE: M02774

#接交人: 2400011041

内存: 3932kB

时间: 50ms

语言: Python3

排突时间: 2025-04-0215:26:34
                                                                                      n,k=map(int,input().split())
                                                                                       wood=[]
for i in range(n):
    wood.append(int(input()))
l=sum(wood)//k
                                                                                      i=1
j=1
if j<1:
    print(0)
elif j==1:
    print(1)
else:</pre>
                                                                                                e:

op=0

while i<=j:

m=(i+j)//2

ot=0

for p in range(n):

ot=vwood[p]//n

if ct<k:

j=n-1

else:

i=m+1

op=m

print(op)
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```

M07161:森林的带度数层次序列存储 tree, http://cs101.openjudge.cn/practice/07161/

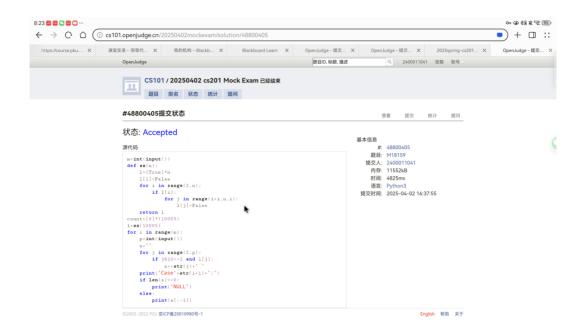
```
思路:
代码:
class tree(object):
    def __init__(self,name):
        self.son=[]
        self.parent=None
        self.name=name
def houxu(node):
    if len(node.son)==0:
        return node.name+''
    else:
        rt="
        for k in node.son:
            rt+=houxu(k)
        rt+=node.name+''
        return rt
n=int(input())
op="
for i in range(n):
    l=list(input().split())
    letter=[]
    degree=[]
    node=[]
    for p in range(0,len(l),2):
        letter.append(I[p])
        node.append(tree(I[p]))
        degree.append(int(I[p+1]))
    ct=0
    for j in range(len(letter)):
        for k in range(ct+1,ct+degree[j]+1):
            node[j].son.append(node[k])
            node[k].parent=node[j]
        ct+=degree[j]
    op+=houxu(node[0])
print(op[:-1])
代码运行截图 (至少包含有"Accepted")
M18156:寻找离目标数最近的两数之和
two pointers, http://cs101.openjudge.cn/practice/18156/
思路:
```

```
代码:
n=int(input())
l=list(map(int,input().split()))
I.sort()
0=q
pre=0
q=len(I)-1
op=I[0]+I[-1]
while p<q:
        while p<q and I[p]+I[q]<n:
                 pre=p
        if abs(l[pre]+l[q]-n) < abs(op-n) or abs(l[pre]+l[q]-n) = abs(op-n) and l[pre]+l[q] < op:
                 op=I[pre]+I[q]
        if p==q:
                 break
        if abs(I[p]+I[q]-n) < abs(op-n) or abs(I[p]+I[q]-n) = abs(op-n) and I[p]+I[q] < op:
                 op=I[p]+I[q]
        if I[p]+I[q]==n:
                 op=n
                 break
        q-=1
        p=pre
print(op)
代码运行截图 (至少包含有"Accepted")
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                              #48799250提交状态
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                              状态: Accepted
                                                                                                           基本信息
                              源代码
                                                                                                               #: 48799250
题目: M07161
                               class tree(object):

def __init__(self,name):
    self.son=[]
    self.parent=None
    self.name:name

def houxu(node):
    if len(node.son)==0:
        return node.name='
else:
                                                                                                           题目: M07161
提交人: 2400011041
内存: 3684kB
时间: 19ms
语言: Python3
提交时间: 2025-04-02 15:54:04
                                       rt=''
for k in node.son:
   rt+=houxu(k)
rt+=node.name+''
return rt
                               op=''
for i in range(n):
    l=list(input().split())
letter=[]
    degree=[]
    node=[]
                                    node=[]
for p in range(0,len(1),2):
   letter.append(1[p])
   node.append(tree(1[p]))
   degree.append(int(1[p+1])))
                                   ct=0
for j in range(len(letter)):
    for k in range(ct+1,ct+degree[j]+1):
        node[j].son.append(node[k])
        node[k].parent=node[j]
    ct+=degree[i]
```

```
M18159:个位为 1 的质数个数
sieve, http://cs101.openjudge.cn/practice/18159/
思路:
代码:
m=int(input())
def ss(n):
    I=[True]*n
    I[1]=False
    for i in range(2,n):
        if I[i]:
            for j in range(i+i,n,i):
                 I[j]=False
    return l
count=[0]*(10005)
I=ss(10005)
for i in range(m):
    p=int(input())
    s="
    for j in range(2,p):
        if j%10==1 and I[j]:
            s+=str(j)+' '
    print('Case'+str(i+1)+':')
    if len(s)==0:
        print('NULL')
    else:
        print(s[:-1])
代码运行截图 (至少包含有"Accepted")
```



M28127:北大夺冠

思路:

hash table, http://cs101.openjudge.cn/practice/28127/

```
代码:
num={}
letter={}
n=int(input())
for i in range(n):
    l=list(input().split(','))
    name=I[0]
    pro=I[1]
    fl=l[2]
    if name in num:
         num[name]+=1
    else:
         num[name]=1
    if fl=='yes':
         if name in letter:
              if pro not in letter[name]:
                  letter[name].append(pro)
         else:
              letter[name]=[pro]
    else:
         if name not in letter:
             letter[name]=[]
```

```
import heapq
l=[]
for name in num:
    heapq.heappush(I,(-1*len(letter[name]),num[name],name))
ct=0
while I and ct<12:
    ct+=1
    op1,op2,op3=heapq.heappop(I)
    op1=-1*op1
    print(ct,op3,op1,op2)</pre>
```



2. 学习总结和收获

本次机考终于 ac6,说明平时做的题还是有效的。主要还是细节上要注意一点,不然代码容易 wa, debug 太浪费时间了。树那一题打的不太熟练,可以再做类似题练练。

如果发现作业题目相对简单,有否寻找额外的练习题目,如"数算 2025spring 每日选做"、LeetCode、Codeforces、洛谷等网站上的题目。

上周高代期中、每日选做停了一下、后面继续。