

27653: Fraction 类

```
def cs27653(l):  
    d = l[1] * l[3]  
    c = l[0] * l[3] + l[1] * l[2]  
    a = min(c, d)  
    b = c + d - a  
    while a != 0:  
        tmp = b % a  
        b = a  
        a = tmp  
    print(c // b, end="/")  
    print(d // b)
```

#43996759提交状态

[查看](#) [提交](#) [统计](#) [提问](#)

状态: **Accepted**

源代码

```
def cs27653(l):  
    d = l[1] * l[3]  
    c = l[0] * l[3] + l[1] * l[2]  
    a = min(c, d)  
    b = c + d - a  
    while a != 0:  
        tmp = b % a  
        b = a  
        a = tmp  
    print(c // b, end="/")  
    print(d // b)  
  
cs27653(tuple(map(int, input().split())))
```

基本信息

#: 43996759
题目: 27653
提交人: 22n2200011358
内存: 3548kB
时间: 23ms
语言: Python3
提交时间: 2024-02-27 16:05:03

04110: 圣诞老人的礼物-Santa Clau's Gifts

```
def cs04110(t):  
    def take1(e):  
        return e[0] / e[1]  
  
    n = t[0]  
    w = t[1]  
    l = []  
    for i in range(n):  
        l.append(tuple(map(int, input().split())))  
    l.sort(key=take1, reverse=True)  
    i, ans = 0, 0  
    while w > 0 and i < n:  
        w -= l[i][1]  
        ans += l[i][0]  
        i += 1  
  
    ans += min(w, 0) * l[i - 1][0] / l[i - 1][1]  
    ans = (ans * 100) // 10 / 10
```

```
print(ans)
```

#43997311提交状态

[查看](#) [提交](#) [统计](#) [提问](#)

状态: [Accepted](#)

源代码

```
def take(e):
    return e[0] / e[1]

def cs04110(t):
    n = t[0]
    w = t[1]
    l = []
    for i in range(n):
        l.append(tuple(map(int, input().split())))
    l.sort(key=take, reverse=True)
    i, ans = 0, 0
    while w > 0 and i < n:
        w -= l[i][1]
        ans += l[i][0]
        i += 1
    ans += min(w, 0) * l[i - 1][0] / l[i - 1][1]
    ans = (ans * 100) // 10 / 10
    print(ans)

cs04110(tuple(map(int, input().split())))
```

基本信息

#: 43997311
题目: 04110
提交人: 22n2200011358
内存: 3620kB
时间: 21ms
语言: Python3
提交时间: 2024-02-27 16:53:06

©2002-2022 POJ 京ICP备20010980号-1

[English](#) [帮助](#) [关于](#)

[18182: 打怪兽](#)

```
def cs18182(nc):
```

```
    def take2(e):
```

```
        return e[0], -e[1]
```

```
    for i in range(nc):
```

```
        n, m, b = map(int, input().split())
```

```
        lt = []
```

```
        for j in range(n):
```

```
            lt.append(tuple(map(int, input().split())))
```

```
lt.sort(key=take2)
```

```
pre = lt[0][0]
```

```
t = 0
```

```
for j in lt:
```

```
    if j[0] == pre:
```

```
        t += 1
```

```
    if t > m:
```

```
        continue
```

```
    else:
```

```
        pre = j[0]
```

```
        t = 1
```

```
    b -= j[1]
```

```
    if b <= 0:
```

```
        print(j[0])
```

```
        break
```

```
if b > 0: print("alive")
```

#43997700提交状态

[查看](#) [提交](#) [统计](#) [提问](#)

状态: Accepted

源代码

```
def take2(e):
    return e[0], -e[1]

def cs18182(nc):
    for i in range(nc):
        n, m, b = map(int, input().split())
        lt = []
        for j in range(n):
            lt.append(tuple(map(int, input().split())))
        lt.sort(key=take2)
        pre = lt[0][0]
        t = 0
        for j in lt:
            if j[0] == pre:
                t += 1
                if t > m:
                    continue
            else:
                pre = j[0]
                t = 1
            b -= j[1]
            if b <= 0:
                print(j[0])
                break
        if b > 0: print("alive")

cs18182(int(input()))
```

基本信息

#: 43997700
题目: 18182
提交人: 22n2200011358
内存: 3820kB
时间: 71ms
语言: Python3
提交时间: 2024-02-27 17:39:16

[18176: 2050 年成绩计算](#)

```
def cs18176(n):
```

```
    from math import sqrt
```

```
    lt = {2, 3, 5, 7, 11, 13, 17, 19}
```

```
    for i in range(23, 10000, 2):
```

```
        bol = True
```

```
        for j in range(3, int(sqrt(i)) + 1, 2):
```

```
            if i % j == 0:
```

```
                bol = False
```

```
break
```

```
if bol: lt.add(i)
```

```
for i in range(n):
```

```
sc = tuple(map(int, input().split()))
```

```
ans = 0
```

```
for j in sc:
```

```
a = sqrt(j)
```

```
if a == int(a) and a in lt:
```

```
ans += j
```

```
ans /= len(sc)
```

```
if ans:
```

```
print(format(ans, ".2f"))
```

```
else:
```

```
print(0)
```

```
'cs18176(int(input().split()[0]))'
```

#43999253提交状态

[查看](#) [提交](#) [统计](#) [提问](#)

状态: Accepted

源代码

```
def cs18176(n):
    from math import sqrt
    lt = {2, 3, 5, 7, 11, 13, 17, 19}
    for i in range(23, 10000, 2):
        bol = True
        for j in range(3, int(sqrt(i)) + 1, 2):
            if i % j == 0:
                bol = False
                break
        if bol: lt.add(i)
    for i in range(n):
        sc = tuple(map(int, input().split()))
        ans = 0
        for j in sc:
            a = sqrt(j)
            if a == int(a) and a in lt:
                ans += j
        ans /= len(sc)
        if ans:
            print(format(ans, ".2f"))
        else:
            print(0)

cs18176(int(input().split()[0]))
```

基本信息

#: 43999253
题目: 18176
提交人: 22n2200011358
内存: 7704kB
时间: 58ms
语言: Python3
提交时间: 2024-02-27 20:12:44

[B-T-primes](#)

```
def b230(n):
```

```
    from math import sqrt
```

```
    t = tuple(map(int, input().split()))
```

```
    lt = {2}
```

```
    for i in range(3, 1000000, 2):
```

```
        bol = True
```

```
        for j in range(3, int(sqrt(i)) + 1, 2):
```

```
            if i % j == 0:
```

```
                bol = False
```

```
                break
```

```

        if bol: lt.add(i)

    for i in t:

        a = sqrt(i)

        if a == int(a) and a in lt:

            print("YES")

        else:

            print("NO")

```

By IcyLemon666, contest: Codeforces Round 142 (Div. 2), problem: (B) T-primes, [Accepted](#), #, [Copy](#)

```

from math import sqrt
st = {2}
for i in range(3, 1000000, 2):
    flag = True
    for j in range(3, int(sqrt(i)) + 1, 2):
        if i % j == 0:
            flag = False
            break
    if flag:
        st.add(i)
input()
for i in map(int, input().split()):
    if sqrt(i) in st:
        print("YES")
    else:
        print("NO")

```

[A - XXXXX](#)

```
def a1364(t):
```

```
    for i in range(t):
```

```
        n, x = map(int, input().split())
```

```
        tp = tuple(map(int, input().split()))
```

```
        a, b, s = n + 1, 0, 0
```

```
        for j in range(n):
```

```
            s += tp[j]
```

```
            if tp[j] % x != 0:
```

```
                if a - n - 1:
```



```
b = j + 1
```

```
else:
```

```
a = j + 1
```

```
if s % x == 0:
```

```
print(max(n - a, b - 1))
```

```
else:
```

```
print(n)
```

By IcyLemon666, contest: Codeforces Round 649 (Div. 2), problem: (A) XXXXX, [Accepted](#), <#>, [Copy](#)

```
def a1364(t):
    for i in range(t):
        n, x = map(int, input().split())
        tp = tuple(map(int, input().split()))
        a, b, s = n+1, 0, 0
        for j in range(n):
            s += tp[j]
            if tp[j] % x != 0:
                if a-n-1:
                    b = j + 1
                else:
                    a = j + 1
        if s % x == 0:
            print(max(n - a, b - 1))
        else:
            print(n)
```

```
a1364(int(input()))
```

Judgement Protocol

总结：本次学习了符合一定条件的最长子序列问题的处理，以及学习了一些低时间复杂度的质数生成，包括筛法。本次就是这两个问题耗时较多。