28170:算鹰

```python
def cs28170():
    n = 10
    chess = []
    flag = []
    for i in range(n):
        chess.append([i == "." for i in input()])
        flag.append([True for i in range(n)])

    def go(x, y):
        flag[x][y] = False
        for i in [(1, 0), (-1, 0), (0, 1), (0, -1)]:
            xi, yi = x + i[0], y + i[1]
            if 0 <= xi < n and 0 <= yi < n and flag[xi][yi] and chess[xi][yi]:
                go(xi, yi)

    ans = 0
    for i in range(n):
        for j in range(n):
            if flag[i][j] and chess[i][j]:
                go(i, j)
```

```
        ans += 1
    print(ans)
```

```python
def cs28170():
    n = 10
    chess = []
    flag = []
    for i in range(n):
        chess.append([i == "." for i in input()])
        flag.append([True for i in range(n)])

    def go(x, y):
        flag[x][y] = False
        for i in [(1, 0), (-1, 0), (0, 1), (0, -1)]:
            xi, yi = x + i[0], y + i[1]
            if 0 <= xi < n and 0 <= yi < n and flag[xi][yi] and chess[x:
                go(xi, yi)

    ans = 0
    for i in range(n):
        for j in range(n):
            if flag[i][j] and chess[i][j]:
                go(i, j)
                ans += 1
    print(ans)

cs28170()
```

18250:冰阔落 I

```
def cs18250():

    try:

        while True:

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

            bottle = [[i] for i in range(n)]

            cola = [i for i in range(n)]

            for i in range(m):

                x, y = map(lambda j: int(j) - 1,
input().split())

                if cola[x] == cola[y]:
```

```python
            print("Yes")
        else:
            print("No")
        tmp = cola[y]
        while bottle[tmp]:
            pour = bottle[tmp].pop()
            bottle[cola[x]].append(pour)
            cola[pour] = cola[x]
    print(bottle, cola)
    ans = []
    for i in range(n):
        if bottle[i]:
            ans.append(i)
    print(len(ans))
    for i in ans[:-1]:
        print(i + 1, end=" ")
    print(ans[-1] + 1)
except:
    pass
```

状态: Accepted

源代码

```python
def cs18250():
    try:
        while True:
            n, m = map(int, input().split())
            bottle = [[i] for i in range(n)]
            cola = [i for i in range(n)]
            for i in range(m):
                x, y = map(lambda j: int(j) - 1, input().split())
                if cola[x] == cola[y]:
                    print("Yes")
                else:
                    print("No")
                    tmp = cola[y]
                    while bottle[tmp]:
                        pour = bottle[tmp].pop()
                        bottle[cola[x]].append(pour)
                        cola[pour] = cola[x]
            ans = []
            for i in range(n):
                if bottle[i]:
                    ans.append(i)
            print(len(ans))
            for i in ans[:-1]:
                print(i+1, end=" ")
            print(ans[-1]+1)
    except:
        pass


cs18250()
```

基本信息

#:	44839979
题目:	18250
提交人:	22n2200011358
内存:	35296kB
时间:	23356ms
语言:	Python3
提交时间:	2024-05-01 12:24:41

05907:二叉树的操作

```python
def cs05907():
    for t in range(int(input())):
        n, m = map(int, input().split())
        dct = {}
        f = {}
        for i in range(n):
            x, y, z = map(int, input().split())
            dct[x] = [y, z]
            f[y] = [x, 0]
            f[z] = [x, 1]
        for i in range(m):
```

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

if ipt[0] == 1:

    dct[f[ipt[1]][0]][f[ipt[1]][1]] = ipt[2]

    dct[f[ipt[2]][0]][f[ipt[2]][1]] = ipt[1]

    f[ipt[1]], f[ipt[2]] = f[ipt[2]], f[ipt[1]]

else:

    x = ipt[1]

    while dct[x][0] + 1:

        x = dct[x][0]

    print(x)
```

#44841682提交状态

状态: **Accepted**

源代码

```
def cs05907():
    for t in range(int(input())):
        n, m = map(int, input().split())
        dct = {}
        f = {}
        for i in range(n):
            x, y, z = map(int, input().split())
            dct[x] = [y, z]
            f[y] = [x, 0]
            f[z] = [x, 1]
        for i in range(m):
            ipt = tuple(map(int, input().split()))
            if ipt[0] == 1:
                dct[f[ipt[1]][0]][f[ipt[1]][1]] = ipt[2]
                dct[f[ipt[2]][0]][f[ipt[2]][1]] = ipt[1]
                f[ipt[1]], f[ipt[2]] = f[ipt[2]], f[ipt[1]]
            else:
                x = ipt[1]
                while dct[x][0] + 1:
                    x = dct[x][0]
                print(x)


cs05907()
```

基本信息

#:	44841682
题目:	05907
提交人:	22n2200011358
内存:	3828kB
时间:	67ms
语言:	Python3
提交时间:	2024-05-01 18:27:23

03151:Pots

```
def cs03151():

    a, b, c = map(int, input().split())

    memory = set()
```

```python
    queue = [[(0, 0), []]]
    while queue:
        nxt = []
        while queue:
            i = queue.pop()
            if i[0][0] == c or i[0][1] == c:
                print(len(i[1]))
                for j in i[1]:
                    print(j)
                exit()
            if i[0] not in memory:
                memory.add(i[0])
                if i[0][0]:
                    nxt.append([(0, i[0][1]), i[1] +
["DROP(1)"]])
                    nxt.append([(max(0, i[0][0] +
i[0][1] - b), min(i[0][0] + i[0][1], b)), i[1] +
["POUR(1,2)"]])
                if i[0][1]:
                    nxt.append([(i[0][0], 0), i[1] +
["DROP(2)"]])
                    nxt.append([(min(i[0][0] + i[0][1],
```

```
a), max(0, i[0][0] + i[0][1] - a)), i[1] + ["POUR(2,1)"]])
                if i[0][0] - a:
                    nxt.append([(a, i[0][1]), i[1] +
["FILL(1)"]])
                if i[0][1] - b:
                    nxt.append([(i[0][0], b), i[1] +
["FILL(2)"]])

        queue = nxt
    print("impossible")
```

源代码

```python
def cs03151():
    a, b, c = map(int, input().split())
    memory = set()
    queue = [[(0, 0), []]]
    while queue:
        nxt = []
        while queue:
            i = queue.pop()
            if i[0][0] == c or i[0][1] == c:
                print(len(i[1]))
                for j in i[1]:
                    print(j)
                exit()
            if i[0] not in memory:
                memory.add(i[0])
                if i[0][0]:
                    nxt.append([(0, i[0][1]), i[1] + ["DROP(1)"]])
                    nxt.append([(max(0, i[0][0] + i[0][1] - b), min(i[0
                if i[0][1]:
                    nxt.append([(i[0][0], 0), i[1] + ["DROP(2)"]])
                    nxt.append([(min(i[0][0] + i[0][1], a), max(0, i[0]
                if i[0][0] - a:
                    nxt.append([(a, i[0][1]), i[1] + ["FILL(1)"]])
                if i[0][1] - b:
                    nxt.append([(i[0][0], b), i[1] + ["FILL(2)"]])

        queue = nxt
    print("impossible")
cs03151()
```

基本信息

#: 44842354
题目: 03151
提交人: 22n2200011358
内存: 3664kB
时间: 23ms
语言: Python3
提交时间: 2024-05-01 20:50:58

05443:兔子与樱花

```
def cs05442():

    dct = {}
```

```python
n = int(input()) - 1
for i in range(n):
    ipt = input().split()
    dct[ipt[0]] = []
    for j in range(int(ipt[1])):
        dct[ipt[0]].append((ipt[j * 2 + 2], int(ipt[j * 2 + 3])))
s = "ABCDEFGHIJKLMNOPQRSTUVWXYZa"
tmp = []
for i in range(n):
    tmp += [(i, s.find(j[0]), j[1]) for j in dct[s[i]]]
tmp.sort(key=lambda i: i[2])
dest = [-1 for i in range(n + 1)]
ans, j = 0, 0
for i in tmp:
    iid, jid = i[0], i[1]
    while dest[iid] + 1:
        iid = dest[iid]
    while dest[jid] + 1:
        jid = dest[jid]
    if iid - jid:
        dest[iid] = jid
```

```
        ans += i[2]
        j += 1
        if j == n:
            break

print(ans)
```

02754:八皇后

```python
def cs02754():
    c = "12345678"
    a = []


    def go(ans, n):
        if n == 8:
```

```python
            a.append(ans)
        for i in c:
            if ans.find(i) == -1:
                k, flag = 0, True
                for j in ans:
                    if int(i) - n == int(j) - k or int(i) +
n == int(j) + k:
                        flag = False
                        break
                    k += 1
                if flag:
                    go(ans + i, n + 1)

    go("", 0)
    for i in range(int(input())):
        print(a[int(input()) - 1])


cs02754()
```

状态: Accepted

源代码

```python
def cs02754():
    c = "12345678"
    a = []

    def go(ans, n):
        if n == 8:
            a.append(ans)
        for i in c:
            if ans.find(i) == -1:
                k, flag = 0, True
                for j in ans:
                    if int(i) - n == int(j) - k or int(i) + n == int(j):
                        flag = False
                        break
                    k += 1
                if flag:
                    go(ans + i, n + 1)

    go("", 0)
    for i in range(int(input())):
        print(a[int(input())-1])


cs02754()
```

总结: 本次作业难度低于上次, 想明白以后基本一遍过, POT 那题多花了点时间, 是看到 bfs 的提示并且数据量比较小才做出来的