

SW Expert Academy

문제 : 달팽이 숫자

```
a = int(input())
for k in range(a):
    print('#'+str(k+1))
    n = int(input())
    li=[[0 for i in range(n)] for j in range(n)]
    vector=[(0,1), (1,0), (0,-1), (-1,0)]
    cnt = 1
    li[0][0]=cnt

    column, row, change = 0, 0, 0
    while True:
        while True:
            tmp_row = row
            tmp_column = column
            row=row+vector[change][0]
            column += vector[change][1]
            if column<0 or column>=n or row<0 or row>=n:
                row=tmp_row
                column=tmp_column
                break
            if li[row][column]!=0:
                row=tmp_row
                column=tmp_column
                break
            cnt+=1
            li[row][column] = cnt

        change+=1
        if change==4:
            change=0
        if cnt==n*n:
            break
```

```

for idx in range(n):
    s=''
    for idx2 in range(n):
        s+=str(li[idx][idx2])+" "
    print(s[:-1])

```

문제 : 숫자 배열 회전

```

T = int(input())
for i in range(T):
    N = int(input())
    li = []
    for j in range(N):
        li.append(list(map(int, input().split())))

    s_li = []
    for f in range(3):
        result=[]
        for j in range(N):
            s=''
            tmp=[]
            for k in range(N-1, -1, -1):
                s+=str(li[k][j])
                tmp.append(str(li[k][j]))
            s+=' '
            s_li.append(s[:-1])
            result.append(tmp)

        li=result
    print('#'+str(i+1))
    for idx2 in range(N):
        tmp_result = ''
        for idx in range(0, len(s_li), N):
            tmp_result+=s_li[idx+idx2]+" "
        print(tmp_result[:-1])

```

문제 : 어디에 단어가 들어갈 수 있을까

```

T = int(input())
for k in range(T):
    N, K = map(int, input().split())
    li=[]
    for i in range(N):
        li.append(list(map(int, input().split())))

    result=0
    for i in range(N):
        cnt=0
        for j in range(N):
            if li[i][j]==1:
                cnt+=1
            else:
                if cnt==K:
                    result+=1
                    cnt=0
                else:
                    cnt=0

        if cnt==K:
            result+=1

    for i in range(N):
        cnt=0
        for j in range(N):
            if li[j][i]==1:
                cnt+=1
            else:
                if cnt==K:
                    result+=1
                    cnt=0
                else:
                    cnt=0

        if cnt==K:
            result+=1

```

```
print(f'#{k+1} {result}')
```

문제 : 날짜 계산기

```
T = int(input())
li = [31,28,31,30,31,30,31,31,30,31,30,31]
for j in range(T):
    month1, day1, month2, day2 = map(int, input().split())
    result1=day1
    for i in range(1,month1):
        result1+=li[i-1]

    result2=day2
    for i in range(1,month2):
        result2+=li[i-1]

    result = result2-result1+1

    print(f'#{j+1} {result}')
```

문제 : 패턴 마디의 길이

```
T = int(input())
for i in range(T):
    pattern = [[]]
    s = input()
    for j in range(10):
        if s[:j] == s[j:2*j]:
            if pattern[-1]*2==s[:j]:
                break
            pattern.append(s[:j])

    print(f'#{i+1} {len(pattern[-1])}')
```

문제 : 두 개의 숫자열

```

T = int(input())
for i in range(T):
    N,M=map(int,input().split())
    N_list=list(map(int,input().split()))
    M_list=list(map(int,input().split()))

    if N<M:
        li=[]
        for j in range(M-N+1):
            li.append(sum([N_list[i]*M_list[i+j] for i in range(N)]))
            print(f'#{i+1} {max(li)}')
    else:
        li=[]
        for j in range(N-M+1):
            li.append(sum([N_list[i+j]*M_list[i] for i in range(M)]))
            print(f'#{i+1} {max(li)}')

```

문제 : 수도 요금 경쟁

```

T = int(input())
for i in range(T):
    li = list(map(int, input().split()))
    P, Q, R, S, W = li[0], li[1], li[2], li[3], li[4]
    A = P*W
    B = lambda R:Q+(W-R)*S if R<W else Q
    if A<B(R):
        print(f'#{i+1} {A}')
    else:
        print(f'#{i+1} {B(R)}')

```

문제 : 새로운 불면증 치료법

```

T = int(input())
for i in range(T):
    s = set()
    cnt=0
    real = input()
    while True:

```

```
tmp=str(int(real)*(cnt+1))
result = []
for j in tmp:
    s.add(j)
    result.append(j)
cnt+=1
if len(s)==10:
    q=''
    for k in result:
        q+=k
    print(f'#{i+1} {q}')
    break
```