

# challenge

November 27, 2018

## 0.1 A Very Odd Problem

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In [ ]: #Problem          : A Very Odd Problem
        #Language         : Python 3
        #Compiled Using    : py_compile
        #Version           : Python 3.4.3
        #Input for your program will be provided from STDIN
        #Print out all output from your program to STDOUT

import sys
from collections import Counter

data = sys.stdin.read().splitlines()

array = data[1].split()
array = [int(x) for x in array]

def checkArray():
    if(len(array)==0):
        print("NO")
        return None
    evenNumbers = 0
    oddNumbers = 0
    i=0
    while(i<len(array)):
        if(array[i]%2==0):
            evenNumbers+=1
        else:
            oddNumbers+=1
        i+=1
    '''evenNumbers = [int(x)%2==0 for x in array]
    oddNumbers = [int(x)%2==0 for x in array]
    count = list(Counter(evenNumbers).values())
    if(int(array[0])%2==0):
        evenNumbers=count[0]
        if(len(count)>1):
            oddNumbers=count[1]
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        else:
            oddNumbers=0
    else:
        if(len(count)>1):
            evenNumbers=count[1]
        else:
            evenNumbers=0
            oddNumbers=count[0]
'''
if(evenNumbers<2):
    print("NO")
    return None
if(sum(array)%2==1 and oddNumbers==0):
    print("NO")
    return None
print("YES")
checkArray()

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## 0.2 Tracing Vile Angus

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In [ ]: #Problem          : Tracing Vile Angus
        #Language         : Python 3
        #Compiled Using   : py_compile
        #Version          : Python 3.4.3
        #Input for your program will be provided from STDIN
        #Print out all output from your program to STDOUT

import sys

data = sys.stdin.read().splitlines()

message = list(data[0])
if(int(data[1])>0):
    N=int(data[1])
    j=N-1+2
    while(j>=2):
        line = data[j]
        row = line.split()
        start = int(row[0])
        first = row[1]
        second = row[2]
        i = start
        #print(''.join(message))
        #print(line)
        while(i<len(message)):
            #print("first=",first,"second",second)
            s = message[i].lower()
            if(s==first):

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        if(message[i].islower()):
            message[i]=second
        else:
            message[i]=second.upper()
    if(s==second):
        if(message[i].islower()):
            message[i]=first
        else:
            message[i]=first.upper()
    i+=1
    j-=1
print(''.join(message))

```

### 0.3 Passport Control

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In [ ]: #Problem          : Passport Control
        #Language        : Python 3
        #Compiled Using   : py_compile
        #Version          : Python 3.4.3
        #Input for your program will be provided from STDIN
        #Print out all output from your program to STDOUT

import sys

data = sys.stdin.read().splitlines()

N=int(data[0])
M=int(data[1])
i=0

agent      = [0]*N
groupsCount = [0]*N

def checkGroup(g):
    i = 0
    free = agent.index(min(agent))
    agent[free]+=g
    groupsCount[free]+=1
    if(groupsCount[free]%10==0):
        agent[free]+=5

for line in data[2:] :
    #print(agent)
    #print(groupsCount)
    checkGroup(int(line))
s=""
for x in groupsCount:

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s+=str(x)+" "  
print(s)
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