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from tkinter import *
import time
import random as r

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#2017

h=600
w=1000

master=Tk()
screen=Canvas(master,width=w,height=h,bg="white")
screen.pack()

cr=("pink","yellow","green","red","hot pink","light blue","blue","black","white","dark
blue","light gray","gray","dark gray")

def move(a,b,maxi):
    l[b-1].append(l[a-1].pop())
    screen.delete(ALL)
    for e in range(len(l)):
        for i in range(len(l[e])):
            screen.create_rectangle(((w/len(l))*e)+(8*(maxi+1-l[e][i])),h-
(20*i),((w/len(l))*(e+1))-(8*(maxi+1-l[e][i])),h-(20*(i+1)),fill=cl[l[e][i]-1])
            screen.update()
            time.sleep(0.5)

def tower(n,s,z,maxi):
    #print("a")

    c=6-s-z
    if n==1:
        move(s,z,maxi)
    else:
        tower(n-1,s,c,maxi)
        #print(c)
        move(s,z,maxi)
        tower(n-1,c,z,maxi)

l1=[]
l2=[]
l3=[]
l=[l1,l2,l3]

maxi=int(input("Enter number of discs: "))

for e in range(maxi):
    l1.append(maxi-e)

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cl=[]
for e in range(maxi):
    cl.append(r.choice(cr))
print(len(cl))
tower(maxi,1,3,maxi)
print(11)
print(12)
print(13)
```