CSE422 LAB Assignment 1

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task1

def pathway(ad,p,d):

key=0

for v in ad[d]:

if v not in p:

p[v]=ad[v]

else:

p[v].append(ad[v])

for k,v in p.items():

if 6 in v:

key=k

break

return key

pos=int(input())

conc=int(input())

adj={}

for c in range(conc):

m=[int(e) for e in input().split()]

if m[0] in adj.keys():

adj[m[0]].append(m[1])

else:

adj[m[0]]=[m[1]]

nora=int (input())

path={}

count=1

while True:

index=pathway(adj,path,0)

if index!=0:

count+=1

break

else:

index=pathway(adj,path)

print(count)

task2

f = open("lab1task2.txt", "r")

data=f.read().split("\n")

print(data)

edge=data[2:-3]

des=data[-3]

p=data[-2]

q=data[-1]

nodes=data[0]

print(edge)

print(des,nodes,p,q)

dict = {}

d = {}

for x in range(int(nodes)):

dict[str(x)]=[]

d[str(x)]=-1

for x in edge:

if(dict.get(x[2]) is not None):

dict.get(x[2]).append(x[0])

else:

dict[x[2]] = [x[0]]

dict

def bfs(graph, start):

visited=[start]

queue=[start]

d[start]=0

# print(d[start])

while queue:

node = queue.pop(0)

# print (node)

for i in graph[node]:

if i not in visited:

# print(i)

d[i]=d[node]+1

# print(d[i])

visited.append(i)

queue.append(i)

if(d[p]<d[q]):

print("Nora Wins")

else:

print("Lara Wins")