#BellmannFord(this doesnt work on negative loop cycle.)

g=[

[0,6,4,5,False,False],

[False,0,False,False,-1,False],

[False,-2,0,False,3,False],

[False,False,-2,0,False,-1],

[False,False,False,False,0,3],

[False,False,False,False,False,0]

]

d={0:"A",1:"B",2:"C",3:"D",4:"E",5:"F"}

E\_L=[]

for i in range(len(g)):

for j in range(len(g[i])):

if g[i][j]!=False and g[i][j]!=0:

E\_L.append(tuple((i,j)))

print(E\_L)

dist={}

for i in range(len(g)):

dist[i]=float("inf")

dist[0]=0

print(dist)

for i in range(len(g)-1):

for j in E\_L:

new\_dist=dist[j[0]]+g[j[0]][j[1]]

if dist[j[1]]>new\_dist:

dist[j[1]]=new\_dist

print(dist)

OUTPUT:

[(0, 1), (0, 2), (0, 3), (1, 4), (2, 1), (2, 4), (3, 2), (3, 5), (4, 5)]

{0: 0, 1: inf, 2: inf, 3: inf, 4: inf, 5: inf}

{0: 0, 1: 1, 2: 3, 3: 5, 4: 0, 5: 3}