# A B C D

input\_graph=[[0,1,1,0], #A

[0,0,0,1], #B

[1,1,0,1], #C

[0,0,1,0]] #D

def page\_rank(graph):

page\_rank=[]

return\_value=[]

for i in range(len(graph)):

page\_rank.append((1/float(len(graph))))

for i in range(0,2):

pre\_page\_rank=page\_rank[:]

for j in range(len(graph)):

pagerankj=0.0

for k in range(len(graph)):

if graph[k][j]==1:

count=0

for l in range(len(graph[k])):

if graph[k][l]==1:

count=count+1

pagerankj=pagerankj+pre\_page\_rank[k]/float(count)

page\_rank[j]=pagerankj

for i in range(len(page\_rank)):

return\_value.append([page\_rank[i],i])

return\_value.sort(key=lambda x: x[0])

final\_page\_rank=[]

for i in range(len(return\_value)):

final\_page\_rank.append([return\_value[i][1],i])

return final\_page\_rank

print(page\_rank(input\_graph))

OUTPUT:

unbutu@ubuntu:~/Desktop/Study/dwm$ python pagerank.py

[[0, 0], [1, 1], [3, 2], [2, 3]]