This function can be applied to find the connected components of an undirected graph using BFS.

def accessible(g, s):

"""Returns the set of vertices of the graph g that are accessible

from the vertex s"""

acc = set()

acc.add(s)

list = [s]

while len(list) > 0:

x = list[0]

list = list[1 : ]

for y in g.parseNout(x):

if y not in acc:

acc.add(y)

list.append(y)

return acc