**Python program for 8-puzzle Problem**

from collections import deque

goal = '123456780'

moves = {0:[1,3],1:[0,2,4],2:[1,5],3:[0,4,6],4:[1,3,5,7],5:[2,4,8],6:[3,7],7:[4,6,8],8:[5,7]}

def bfs(start):

q = deque([(start, "")])

visited = {start}

while q:

s, path = q.popleft()

if s == goal: return path

i = s.index('0')

for m in moves[i]:

t = list(s)

t[i], t[m] = t[m], t[i]

ns = ''.join(t)

if ns not in visited:

visited.add(ns)

q.append((ns, path + ns + " "))

return "No solution"

start = '103425786' # Example start state

print("Steps:\n", bfs(start))

Output

Steps:

123405786 123450786 123456780