Python program for 8 queen Problem

N=8

def printSol(board):

for i in board:print(" ".join(str(x) for x in i))

def safe(board,r,c):

for i in range(c):

if board[r][i]==1:return False

for i,j in zip(range(r,-1,-1),range(c,-1,-1)):

if board[i][j]==1:return False

for i,j in zip(range(r,N),range(c,-1,-1)):

if board[i][j]==1:return False

return True

def solve(board,c):

if c>=N:return True

for i in range(N):

if safe(board,i,c):

board[i][c]=1

if solve(board,c+1):return True

board[i][c]=0

return False

board=[[0]\*N for \_ in range(N)]

if solve(board,0):printSol(board)

else:print("No solution")

Output

1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 0

0 0 0 0 1 0 0 0

0 0 0 0 0 0 0 1

0 1 0 0 0 0 0 0

0 0 0 1 0 0 0 0

0 0 0 0 0 1 0 0

0 0 1 0 0 0 0 0