n = int(input("Enter the value of n"))

board = []

def getBoard():

for i in range(n):

nthList = []

for j in range(n):

nthList.append(0)

board.append(nthList)

#hi this code is created by mr\_gk

def printBoard():

for i in range(n):

for j in range(n):

print(board[i][j], end = " ")

print("")

def isSafe(row, col):

for i in range(n):

if board[row][i] == 1:

return False

for j in range(n):

if board[j][col] == 1:

return False

i = row-1

j = col-1

while(i>=0 and j>=0):

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

return False

i = i-1

j = j-1

i = row-1

j = col+1

while(i>=0 and j<n):

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

return False

i = i-1

j = j+1

i = row+1

j = col-1

while(i<n and j>=0):

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

return False

i = i+1

j = j-1

i = row+1

j = col+1

while(i<n and j<n):

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

return False

i = i+1

j = j+1

return True

def Put(n, count):

if count == n:

return True

for i in range(n):

for j in range(n):

if isSafe(i, j):

board[i][j] = 1

count = count+1

if Put(n, count) == True:

return True

board[i][j] = 0

count = count-1

return False

getBoard()

Put(n, 0)

printBoard()

