# Python program to rotate a matrix by 90 degrees

M = 3

N = 3

matrix = [[12, 23, 34],

[45, 56, 67],

[78, 89, 91]]

def rotateMatrix(k) :

global M, N, matrix

temp = [0] \* M

k = k % M

for i in range(0, N) :

for t in range(0, M -k) :

temp[t] = matrix[i][t]

for j in range(M -k, M) :

matrix[i][j -M + k] = matrix[i][j]

for j in range(k, M) :

matrix[i][j] = temp[j -k]

def displayMatrix() :

global M, N, matrix

for i in range(0, N) :

for j in range(0, M) :

print ("{} " . format(matrix[i][j]), end = "")

print ()

k = 2

rotateMatrix(k)

displayMatrix()