# Transpose of a matrix

row = int(input("Enter the number of rows:")) col = int(input("Enter the number of columns:")) a = []

# Initialize matrix matrixa = [] matrixb = []

result = []

print("Enter the entries rowwise:") # For user input

for i in range(row): # A for loop for row entries a = []

for j in range(col): # A for loop for column entries a.append(int(input()))

matrixa.append(a)

# For printing matrix for i in range(row):

for j in range(col): print(matrixa[i][j], end=" ")

print()

# result matrix

for i in range(col): a = []

for j in range(row): a.append(0)

result.append(a)

'''

for i in range(col):

for j in range(row): print(result[i][j], end=" ")

print()

'''

# transpose of matrix for i in range(row):

for j in range(col): result[j][i] = matrixa[i][j]

# print result

print("Result matrix for transpose of matrix is:") for i in range(col):

for j in range(row): print(result[i][j], end=" ")

print()

'''Enter the number of rows:2 Enter the number of columns:2 Enter the entries rowwise:

1

2

3

4

1 2

3 4

Result matrix for transpose of matrix is:

1 3

2 4 '''