class Matrix:

def \_\_init\_\_(self, data):

self.data = data

def add(self, other):

result = []

for i in range(len(self.data)):

row = []

for j in range(len(self.data[0])):

row.append(self.data[i][j] + other.data[i][j])

result.append(row)

return Matrix(result)

def transpose(self):

result = []

for i in range(len(self.data[0])):

row = []

for j in range(len(self.data)):

row.append(self.data[j][i])

result.append(row)

return Matrix(result)

def display(self):

for row in self.data:

print(row)

m1 = Matrix([[1, 2], [3, 4]])

m2 = Matrix([[5, 6], [7, 8]])

sum\_matrix = m1.add(m2)

transpose\_matrix = sum\_matrix.transpose()

print("Sum of matrices:")

sum\_matrix.display()

print("Transpose of the result:")

transpose\_matrix.display()