Assignment No 3

'''

Experiment No. 9 : Write a Python Program to compute following computation on matrices :

a)Addition of two matrices

b)Subtraction of two matrices

c)Multiplication of two matrices

d)Transpose of a matix

'''

import numpy

# initializing matrices

x = numpy.array([[1, 2], [4, 5]])

y = numpy.array([[7, 8], [9, 10]])

# using add() to add matrices

print("The element wise addition of matrix is : ")

print(numpy.add(x, y))

# using subtract() to subtract matrices

print("The element wise subtraction of matrix is : ")

print(numpy.subtract(x, y))

# using dot() to multiply matrices

print ("The product of matrices is : ")

print (numpy.dot(x,y))

# using "T" to transpose the matrix

print("The transpose of given matrix is : ")

print(x.T)

Output :