1. Write a Python Program to Add Two Matrices?

ANS: X = [[12,7,3],

[4 ,5,6],

[7 ,8,9]]

Y = [[5,8,1],

[6,7,3],

[4,5,9]]

result = [[0,0,0],

[0,0,0],

[0,0,0]]

# iterate through rows

for i in range(len(X)):

# iterate through columns

for j in range(len(X[0])):

result[i][j] = X[i][j] + Y[i][j]

for r in result:

print(r)

[17, 15, 4]

[10, 12, 9]

[11, 13, 18]

1. Write a Python Program to Multiply Two Matrices?

ANS: A = [[12, 7, 3],

[4, 5, 6],

[7, 8, 9]]

# take a 3x4 matrix

B = [[5, 8, 1, 2],

[6, 7, 3, 0],

[4, 5, 9, 1]]

result = [[0, 0, 0, 0],

[0, 0, 0, 0],

[0, 0, 0, 0]]

# iterating by row of A

for i in range(len(A)):

# iterating by column by B

for j in range(len(B[0])):

# iterating by rows of B

for k in range(len(B)):

result[i][j] += A[i][k] \* B[k][j]

for r in result:

print(r)

[114, 160,60,27]

[74, 97, 73, 14]

[119, 157, 112, 23]

1. Write a Python Program to Transpose a Matrix?

ANS: X = [[12,7],

[4 ,5],

[3 ,8]]

result = [[0,0,0],

[0,0,0]]

# iterate through rows

for i in range(len(X)):

# iterate through columns

for j in range(len(X[0])):

result[j][i] = X[i][j]

for r in result:

print(r)

[12,4,3]

[7,5,8]

1. Write a Python Program to Sort Words in Alphabetic Order?

ANS: my\_str = "Hello this Is an Example With cased letters"

# To take input from the user

#my\_str = input("Enter a string: ")

# breakdown the string into a list of words

words = [word.lower() for word in my\_str.split()]

# sort the list

words.sort()

# display the sorted words

print("The sorted words are:")

for word in words:

print(word)

The sorted words are:

An

Case

Example

Hello

Is

Letters

This

with

1. Write a Python Program to Remove Punctuation From a String?

ANS: import string

test\_str = 'Gfg, is best: for ! Geeks ;'

test\_str = test\_str.translate

(str.maketrans('', '', string.punctuation))

print(test\_str)

<built-in method translate of string object at 0x7fab5b7c7550>