1. Write a Python Program to Add Two Matrices?

Ans.

# Program for addition of Two matrices of same order

from itertools import product

addition = []

print("Enter rows and columns of first matrix ")

row1 = int(input("Enter no.of rows: "))

columns1 = int(input("Enter no.of columns: "))

print("enter each element adn click enter to enter next number")

matrix\_1 = []

for i in range(row1):

a = []

for k in range(columns1):

a.append(int(input()))

matrix\_1.append(a)

print("Enter rows and colums of second matrix ")

row2 = int(input("Enter no.of rows: "))

columns2 = int(input("Enter no.of columns: "))

print("enter each element adn click enter to enter next number")

matrix\_2 = []

# creating of Zero matrix

for i in range(row1):

addition.append([])

for i in range(row1):

for j in range(columns1):

addition[i].append(0)

if row1==row2 and columns1==columns2:

print("These two matrices can be added")

print("Now enter elements of second matrix")

for i in range(row2):

b = []

for k in range(columns2):

b.append(int(input()))

matrix\_2.append(b)

for i,j in product(range(0,row1),range(0,row2)):

addition[i][j] += matrix\_1[i][j]+matrix\_2[i][j]

else:

print("These two matrices cant be multiplied or added")

print(addition)

1. Write a Python Program to Multiply Two Matrices?

Ans.

# program to multiply two matrices

multiplication = []

print("Enter rows and columns of first matrix ")

row1 = int(input("Enter no.of rows: "))

columns1 = int(input("Enter no.of columns: "))

matrix\_11 = []

for i in range(row1):

a = []

for k in range(columns1):

a.append(int(input()))

matrix\_11.append(a)

print("Enter the order of the second matrix ")

row2 = int(input("Enter no.of rows: "))

columns2 = int(input("Enter no.of columns: "))

if columns1==row2:

print("These two matrices can be multiplied")

print("Now enter elements of second matrix")

matrix\_22 = []

for i in range(row2):

b = []

for k in range(columns2):

b.append(int(input()))

matrix\_22.append(b)

# creation of Identity matrix

for i in range(row1):

multiplication.append([])

for i in range(row1):

for j in range(columns2):

multiplication[i].append(0)

# Now writing main code for multiplication

for i in range(row1):

for k in range(columns1):

for j in range(columns2):

multiplication[i][j] += matrix\_11[i][k]\*matrix\_22[k][j]

print(multiplication)

1. Write a Python Program to Transpose a Matrix?

Ans.

A = [[1,2,3],[4,5,6],[7,8,9]]

transpose = [[0,0,0],[0,0,0],[0,0,0]]

for i in range(len(A)):

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

transpose[j][i] = A[i][j]

print(transpose)

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

Ans.

string = input("Enter your string here: ")

my\_list = string.split(sep = " ")

my\_list.sort()

result = ""

for i in my\_list:

result += i+" "

print(result[0:-1])

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

Ans.

test\_string = "what seem's to be the!, best complimets&&is best : ! there is <> ;"

punctuations = '''!()-[]{};:'"\,<>./?@#$%^&\*\_~'''

for punct in test\_string:

if punct in punctuations:

test\_string = test\_string.replace(punct, "")

print(test\_string)