1. Write a Python Program to Add Two Matrices?

**Ans:**

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

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

c=[]

a\_rows=len(a)

a\_cols=len(a[0])

b\_rows=len(b)

b\_cols=len(b[0])

if a\_rows != b\_rows and a\_cols!=b\_cols:

print("matrixs are not of same dimension")

else:

# preparing output matrix to store results

for i in range(a\_rows):

l=[]

for j in range(a\_cols):

l.append(0)

c.append(l)

# performing matrix addition

for i in range(a\_rows):

for j in range(a\_cols):

c[i][j]=a[i][j]+b[i][j]

print(c)

1. Write a Python Program to Multiply Two Matrices?

**Ans:**

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

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

c=[]

a\_rows=len(a)

a\_cols=len(a[0])

b\_rows=len(b)

b\_cols=len(b[0])

if a\_rows != b\_cols:

print("matrixes are not in proper dimensions for multiplication.")

else:

# preparing output matrix to store results

for i in range(a\_rows):

l=[]

for j in range(a\_cols):

l.append(0)

c.append(l)

# performing matrix multiplication

for i in range(a\_rows):

for j in range(b\_cols):

for k in range(b\_rows):

c[i][j]+=a[i][k]\*b[k][j]

print(c)

1. Write a Python Program to Transpose a Matrix?

**Ans:**

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

c=[]

a\_rows=len(a)

a\_cols=len(a[0])

# preparing output matrix to store results

for i in range(a\_cols):

l=[]

for j in range(a\_rows):

l.append(0)

c.append(l)

# performing transpose

for i in range(a\_rows):

for j in range(a\_cols):

c[j][i]=a[i][j]

print(c)

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

**Ans:**

words=["hello", "this", "is", "words", "sorting", "example"]

words.sort()

print("words in sorting order are:")

for i in words:

print(i)

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

**Ans:**

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

my\_str = "Hello!!!, this string ---having punctuations."

for i in my\_str:

if i in punctuations:

my\_str=my\_str.replace(i, "")

print(my\_str)