1. Write a Python Program to Add Two Matrices?

from numpy import \*

m1 = array([[1,2,3],[2,3,5],[4,3,7]])

m2 = array([[4,2,5],[2,9,5],[0,3,1]])

m3= empty(shape=(3,3),dtype='object') *#to initialize empty matrix*

for i in range(3):

for j in range(3):

m3[i][j]= m1[i][j]+m2[i][j]  *#adding values at same index position*

print ('sum is: \n', m3)

1. Write a Python Program to Multiply Two Matrices?

from numpy import \*

m1 = array([[1,2,3],[2,3,5],[4,3,7]])

m2 = array([[4,2,5],[2,9,5],[0,3,1]])

m3= empty(shape=(3,3),dtype='object') *#to initialize empty matrix*

for i in range(3): *#change to next row after all columns are done*

for j in range(3): *#column changes after every sum*

sum=0

for k in range(3): *#loop for each element of a column*

sum=sum+m1[i][k]\*m2[k][j]

m3[i][j]=sum

print ('multiplication is: \n', m3)

1. Write a Python Program to Transpose a Matrix?

from numpy import \*

m1 = array([[1,2,3],[2,3,5],[4,3,7]])

m2 = empty(shape=(3,3),dtype='object')

for i in range(3):

for j in range(3):

m2[i][j]=m1[j][i]

print ('transpose is: \n', m2)

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

x = input('enter a word: ')

l=len(word)

word=list(x) *#create list of letters*

for i in range(l):

j=i+1

while j<l:

if ord(word[i])>ord(word[j]): *#compare letters with their ascii number*

x=word[i]

word[i]=word[j]

word[j]=x

j+=1

print("".join(word))

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

x = input('enter a sentence: ')

sent=list(x) *#creating list of all input characters*

i=0

while i< len(sent):

y = ord(sent[i])

*# check if ascii number of character belongs to alphabet or space, remove if not*

if not((y in range(65,91)) or (y in range(97,122)) or (y==32)):

sent.pop(i)

i=i+1

print("".join(sent))