Que:-1 Write a Python Program to Add Two Matrices?

In [5]:
```
#solution:-

import numpy as np

mat_1 = np.array([[1,4,6],
        [7,5,88],
        [8,5,77]])
mat_2 = np.array([[12,43,74],
        [5,8,3],
        [8,9,9]])

matsum = np.add(mat_1,mat_2)
print(f"The sum of \n{mat_1} and \n\n{mat_2} is \n\n{matsum}")
```

```
The sum of
[[ 1  4  6]
 [ 7  5 88]
 [ 8  5 77]] and

[[12 43 74]
 [ 5  8  3]
 [ 8  9  9]] is

[[13 47 80]
 [12 13 91]
 [16 14 86]]
```

Que:-2 Write a Python Program to Multiply Two Matrices?

In [7]:
```
#solution:-

import numpy as np

mat_1 = np.array([[1,4,6],
        [7,5,88],
        [8,5,77]])
mat_2 = np.array([[12,43,74],
        [5,8,3],
        [8,9,9]])

mulmatrix = np.dot(mat_1,mat_2)
print(f"The product of {mat_1} and \n\n{mat_2} is \n\n{mulmatrix}")
```

```
The product of [[ 1  4  6]
 [ 7  5 88]
 [ 8  5 77]] and

[[12 43 74]
 [ 5  8  3]
 [ 8  9  9]] is

[[  80  129  140]
 [ 813 1133 1325]
 [ 737 1077 1300]]
```

Que:-3 Write a Python Program to Transpose a Matrix?

In [9]:
```
#solution:-

import numpy as np

mat = np.array([[1,4,6],
        [7,5,88],
        [8,5,77]])

b = mat.transpose()
print(f"The tranpose of \n{mat} is \n\n{b}")

```

```
The tranpose of
[[ 1  4  6]
 [ 7  5 88]
 [ 8  5 77]] is

[[ 1  7  8]
 [ 4  5  5]
 [ 6 88 77]]
```

Que:-4 Write a Python Program to Sort Words in Alphabetic Order?

In [12]:
```
#solution:-

def aplha(a):
    b = a.title()
    c = sorted(b.split())
    for i in c:
        print(i)

a = input("Enter a string:- ")
aplha(a)
```

```
Enter a string:- python is easy
Easy
Is
Python
```

Que:-5 Write a Python Program to Remove Punctuation From a String?

In [13]:
```
#solution:-

def removePunctuatuions():
    punctuations = '''!()-[]{};:'"\,<>./?@#$%^&*_~'''
    in_string = input('Enter a String: ')
    out_string = ''
    for ele in in_string:
        if ele not in punctuations:
            out_string += ele
    print(out_string)

removePunctuatuions()
```

```
Enter a String: "Python and data" # science
Python and data  science
```