

## 1. Write a Python Program to Add Two Matrices?

```
In [1]: 1 A = [[1,2,3],
2         [4,5,6],
3         [7,8,9]]
4 B = [[1,2,3],
5       [4,5,6],
6       [7,8,9]]
7
8 result=[[0,0,0],
9         [0,0,0],
10        [0,0,0]]
11
12 for i in range(len(A)):
13     for j in range(len(B[0])):
14         result[i][j] = A[i][j] + B[i][j]
15
16 for k in result:
17     print(k)
```

```
[2, 4, 6]
[8, 10, 12]
[14, 16, 18]
```

## 2. Write a Python Program to Multiply Two Matrices?

```
In [2]: 1 A = [[1,2,3],
2         [4,5,6],
3         [7,8,9]]
4 B = [[1,2,3],
5       [4,5,6],
6       [7,8,9]]
7
8 result=[[0,0,0],
9         [0,0,0],
10        [0,0,0]]
11
12 for i in range(len(A)):
13     for j in range(len(B[0])):
14         result[i][j] = A[i][j] * B[i][j]
15
16 for k in result:
17     print(k)
```

```
[1, 4, 9]
[16, 25, 36]
[49, 64, 81]
```

## 3. Write a Python Program to Transpose a Matrix?

```
In [3]: 1 A = [[1,2,3],
2         [4,5,6],
3         [7,8,9]]
4
5 result=[[0,0,0],
6         [0,0,0],
7         [0,0,0]]
8
9 for i in range(len(A)):
10     for j in range(len(A[0])):
11         result[j][i] = A[i][j]
12
13 for k in result:
14     print(k)
```

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

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

```
In [4]: 1 statement = "Hai! How are you? Hope you are doing good"
        2
        3 words = [word.lower() for word in statement.split()] # creating a list of words from string
        4
        5 words.sort() # sorting the words in the list
        6
        7 words
```

Out[4]: ['are', 'are', 'doing', 'good', 'hai!', 'hope', 'how', 'you', 'you?']

## 5. Write a Python Program to Remove Punctuation From a String?

```
In [5]: 1 statement = "Hai! How are you? Hope you are doing good"
        2
        3 punctuations = '!()-[]{};:."\',<>./?@$%^&*~_''
        4
        5 no_punct = ""
        6 for i in statement:
        7     if i not in punctuations:
        8         no_punct = no_punct + i
        9
        10 print(no_punct)
```

Hai How are you Hope you are doing good

```
In [ ]: 1
```