- 1. Write a Python Program to Add Two Matrices?
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- 3. Write a Python Program to Transpose a Matrix?
- 4. Write a Python Program to Sort Words in Alphabetic Order?
- 5. Write a Python Program to Remove Punctuation From a String?
  - 1. Python program to add two matrices:

```
python
# input two matrices
matrix1 = [[1, 2, 3],
           [4, 5, 6],
           [7, 8, 9]]
matrix2 = [[9, 8, 7],
           [6, 5, 4],
           [3, 2, 1]]
# initialize an empty matrix to store the result
result = [[0, 0, 0],
         [0, 0, 0],
          [0, 0, 0]]
# iterate through rows and columns of matrices
for i in range(len(matrix1)):
    for j in range(len(matrix1[0])):
        result[i][j] = matrix1[i][j] + matrix2[i][j]
# display the result
for r in result:
    print(r)
Output:
csharp
[10, 10, 10]
[10, 10, 10]
[10, 10, 10]
```

2. Python program to multiply two matrices:

```
python
# input two matrices
```

```
matrix1 = [[1, 2],
           [3, 4],
           [5, 6]]
matrix2 = [[7, 8, 9],
           [10, 11, 12]]
# initialize an empty matrix to store the result
result = [[0, 0, 0],
          [0, 0, 0],
          [0, 0, 0]]
# iterate through rows and columns of matrices
for i in range(len(matrix1)):
    for j in range(len(matrix2[0])):
        for k in range(len(matrix2)):
            result[i][j] += matrix1[i][k] * matrix2[k][j]
# display the result
for r in result:
    print(r)
Output:
csharp
[27, 30, 33]
[61, 68, 75]
[95, 106, 117]
  3. Python program to transpose a matrix:
python
# input a matrix
matrix = [[1, 2],
          [3, 4],
          [5, 6]]
# initialize an empty matrix to store the result
```

result = [[0, 0, 0],

[0, 0, 0]]

```
# iterate through rows and columns of the original matrix and assign
values to the transposed matrix
for i in range(len(matrix)):
    for j in range(len(matrix[0])):
        result[j][i] = matrix[i][j]
# display the result
for r in result:
    print(r)
Output:
csharp
[1, 3, 5]
[2, 4, 6]
  4. Python program to sort words in alphabetic order:
python
# input a string
string = "hello world this is a test"
# split the string into a list of words
words = string.split()
# sort the words in alphabetic order
words.sort()
# join the sorted words into a string
sorted_string = " ".join(words)
# display the result
print(sorted_string)
Output:
kotlin
a hello is test this world
```

5. Python program to remove punctuation from a string:

```
python
# import the string module
import string

# input a string
string_with_punctuation = "Hello, World!"

# define a string of punctuation marks to be removed
punctuation = string.punctuation

# initialize an empty string to store the result
string_without_punctuation = ""

# iterate through each character in the original string and add
```