Q1 Write a Python Program to Add Two Matrices?

```
def add_matrices(matrix1, matrix2):
    rows = len(matrix1)
    columns = len(matrix1[0])

    result = [[0] * columns for _ in range(rows)]

    # Perform element-wise addition
    for i in range(rows):
        for j in range(columns):
            result[i][j] = matrix1[i][j] + matrix2[i][j]

    return result

matrix1 = [[1, 2, 3],
           [4, 5, 6],
           [7, 8, 9]]

matrix2 = [[9, 8, 7],
           [6, 5, 4],
           [3, 2, 1]]

result = add_matrices(matrix1, matrix2)

for row in result:
    print(row)
```

Q2. Write a Python Program to Multiply Two Matrices

```
def multiply_matrices(matrix1, matrix2):
    rows1 = len(matrix1)
    columns1 = len(matrix1[0])
    rows2 = len(matrix2)
    columns2 = len(matrix2[0])

    # Check if the matrices can be multiplied
    if columns1 != rows2:
        print("Cannot multiply the matrices. Invalid dimensions.")
        return None

    # Create a result matrix with dimensions rows1 x columns2
    result = [[0] * columns2 for _ in range(rows1)]

    # Perform matrix multiplication
    for i in range(rows1):
        for j in range(columns2):
            for k in range(columns1):
                result[i][j] += matrix1[i][k] * matrix2[k][j]

    return result

# Example usage
matrix1 = [[1, 2, 3],
           [4, 5, 6]]

matrix2 = [[7, 8],
           [9, 10],
           [11, 12]]
```

```
result = multiply_matrices(matrix1, matrix2)

# Print the result matrix
for row in result:
    print(row)
```

Q3. Write a Python Program to Transpose a Matrix?

```
def transpose_matrix(matrix):
    rows = len(matrix)
    columns = len(matrix[0])

    result = [[0] * rows for _ in range(columns)]

    for i in range(rows):
        for j in range(columns):
            result[j][i] = matrix[i][j]

    return result

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

result = transpose_matrix(matrix)

for row in result:
    print(row)
```

Q4. Write a Python Program to Sort Words in Alphabetic Order?

```
def sort_words(words):
    sorted_words = sorted(words)
    return sorted_words

# Example usage
word_list = ["apple", "banana", "cherry", "date", "fig"]

sorted_words = sort_words(word_list)

for word in sorted_words:
    print(word)
```

Q5. Write a Python Program to Remove Punctuation From a String

```
 import string
def remove_punctuation(text):
    # Create a translation table to remove punctuation
    translator = str.maketrans('', '', string.punctuation)

    # Remove punctuation using the translation table
    text_without_punctuation = text.translate(translator)

    return text_without_punctuation

# Example usage
input_text = "Hello, World! This is an example string."

text_without_punctuation = remove_punctuation(input_text)
```

```
print(text_without_punctuation)
```