```
# Function to add two matrices
def add_matrices(matrix1, matrix2):
    result = [[matrix1[i][j] + matrix2[i][j] for j in range(len(matrix1[0]))] for i in range(len(matrix1))]
    return result

# Function to subtract two matrices
def subtract_matrices(matrix1, matrix2):
    result = [[matrix1[i][j] - matrix2[i][j] for j in range(len(matrix1[0]))] for i in range(len(matrix1))]
    return result

# Function to multiply two matrices
def multiply_matrices(matrix1, matrix2):
    result = [[sum(matrix1[i][k] * matrix2[k][j] for k in range(len(matrix2))) for j in
range(len(matrix2[0]))] for i in range(len(matrix1))]
    return result

# Function to compute the transpose of a matrix
def transpose_matrix(matrix):
    result = [[matrix[j][i] for j in range(len(matrix))] for i in range(len(matrix[0]))]
    return result

# Define two matrices
matrix1 = [[1, 2], [3, 4]]  # Matrix 1
matrix2 = [[5, 6], [7, 8]]  # Matrix 2

# Display results
print("Addition of two matrices:")
for row in add_matrices(matrix1, matrix2):
    print(row)

print("\nSubtraction of two matrices:")
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```
for row in subtract_matrices(matrix1, matrix2):
    print(row)

print("\nMultiplication of two matrices:")
for row in multiply_matrices(matrix1, matrix2):
    print(row)

print("\nTranspose of the first matrix:")
for row in transpose_matrix(matrix1):
    print(row)
```