Working with Multi-Dimensional Arrays (Matrix)

```
#include <stdio.h>
#define ROWS 3
#define COLS 3
void matrixAddition(int mat1[ROWS][COLS], int mat2[ROWS][COLS], int result[ROWS][COLS]) {
 for (int i = 0; i < ROWS; i++) {
 for (int j = 0; j < COLS; j++) {
 result[i][j] = mat1[i][j] + mat2[i][j];
 }
 }
}
void displayMatrix(int mat[ROWS][COLS])
{
 for (int i = 0; i < ROWS; i++) {
 for (int j = 0; j < COLS; j++) {
 printf("%d ", mat[i][j]);
 }
 printf("\n");
 }
}
int main() {
 int matrix1[ROWS][COLS] = {
 {3, 2, 4},
 {2, 6, 3},
 {5, 8, 7}
 };
```

```
int matrix2[ROWS][COLS] = {
{1, 4, 6},
{4, 3, 2},
{5, 7, 8}
};
int resultMatrix[ROWS][COLS];
matrixAddition(matrix1, matrix2, resultMatrix);
printf("Matrix 1:\n");
displayMatrix(matrix1);
printf("\nMatrix 2:\n");
displayMatrix(matrix2);
printf("\nMatrix Sum:\n");
displayMatrix(resultMatrix);
return 0;
}
```