Practical 7

#include <stdio.h>

#define ROWS 3

#define COLS 3

// Function to add two matrices and store the result in 'result'

void addMatrices(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];

}

}

}

// Function to display a matrix

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 mat1[ROWS][COLS] = {

{324, 263, 587},

{146, 432, 517},

{949, 211, 314}

};

int mat2[ROWS][COLS] = {

{432, 578, 203},

{586, 194, 823},

{364, 333, 227}

};

int result[ROWS][COLS];

// Calculate the sum of the matrices

addMatrices(mat1, mat2, result);

printf("Matrix 1:\n");

displayMatrix(mat1);

printf("\nMatrix 2:\n");

displayMatrix(mat2);

printf("\nMatrix Sum:\n");

displayMatrix(result);

return 0;

}