```c
#include <stdio.h>

int main() {
    int rows, cols;

    // Input number of rows and columns
    printf("Enter number of rows and columns: ");
    scanf("%d %d", &rows, &cols);

    int a[10][10], b[10][10], sum[10][10];

    // Input elements of first matrix
    printf("\nEnter elements of first matrix:\n");
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            printf("a[%d][%d] = ", i, j);
            scanf("%d", &a[i][j]);
        }
    }

    // Input elements of second matrix
    printf("\nEnter elements of second matrix:\n");
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            printf("b[%d][%d] = ", i, j);
```

```c
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            printf("b[%d][%d] = ", i, j);
            scanf("%d", &b[i][j]);
        }
    }

    // Add both matrices
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            sum[i][j] = a[i][j] + b[i][j];
        }
    }

    // Display result
    printf("\nResultant Matrix (Sum):\n");
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            printf("%d\t", sum[i][j]);
        }
        printf("\n");
    }

    return 0;
}
```

```
Enter number of rows and columns: 3
3

Enter elements of first matrix:
a[0][0] = 1
a[0][1] = 2
a[0][2] = 3
a[1][0] = 4
a[1][1] = 5
a[1][2] = 6
a[2][0] = 7
a[2][1] = 8
a[2][2] = 9

Enter elements of second matrix:
b[0][0] = 1
b[0][1] = 2
b[0][2] = 3
b[1][0] = 4
b[1][1] = 5
b[1][2] = 6
b[2][0] =
7
b[2][1] = 8
b[2][2] = 9
```

```
b[1][2] = 6
b[2][0] =
7
b[2][1] = 8
b[2][2] = 9

Resultant Matrix (Sum):
2   4   6
8   10  12
14  16  18


=== Code Execution Successful ===
```