

```

1  #include <stdio.h>
2
3  int main() {
4      int row, col;
5
6      // Define the dimensions of the matrices
7      printf("Enter the number of rows: ");
8      scanf("%d", &row);
9      printf("Enter the number of columns: ");
10     scanf("%d", &col);
11
12     // Define the two matrices
13     int matrix1[row][col];
14     int matrix2[row][col];
15     int result[row][col];
16
17     // Input elements for the first matrix
18     printf("Enter elements for the first matrix:\n");
19     for (int i = 0; i < row; i++) {
20         for (int j = 0; j < col; j++) {
21             printf("Enter element for matrix1[%d][%d]: ", i, j);
22             scanf("%d", &matrix1[i][j]);
23         }
24     }
25
26     // Input elements for the second matrix
27     printf("Enter elements for the second matrix:\n");
28     for (int i = 0; i < row; i++) {
29         for (int j = 0; j < col; j++) {
30             printf("Enter element for matrix2[%d][%d]: ", i, j);
31             scanf("%d", &matrix2[i][j]);
32         }
33     }
34
35     // Add the matrices
36     for (int i = 0; i < row; i++) {
37         for (int j = 0; j < col; j++) {
38             result[i][j] = matrix1[i][j] + matrix2[i][j];
39         }
40     }
41
42     // Display the result matrix
43     printf("Resultant matrix after addition:\n");
44     for (int i = 0; i < row; i++) {
45         for (int j = 0; j < col; j++) {
46             printf("%d ", result[i][j]);
47         }
48         printf("\n");
49     }
50
51     return 0;
52 }

```