

```

1  #include <stdio.h>
2
3
4  int main() {
5      int rows, cols;
6
7      // Input number of rows and columns
8      printf("Enter number of rows and columns: ");
9      scanf("%d %d", &rows, &cols);
10
11     int a[10][10], b[10][10], sum[10][10];
12
13     // Input elements of first matrix
14     printf("\nEnter elements of first matrix:\n");
15     for (int i = 0; i < rows; i++) {
16         for (int j = 0; j < cols; j++) {
17             printf("a[%d][%d] = ", i, j);
18             scanf("%d", &a[i][j]);
19         }
20     }
21
22     // Input elements of second matrix
23     printf("\nEnter elements of second matrix:\n");
24     for (int i = 0; i < rows; i++) {
25         for (int j = 0; j < cols; j++) {
26             printf("b[%d][%d] = ", i, j);

```

```
24-   for (int i = 0; i < rows; i++) {
25-       for (int j = 0; j < cols; j++) {
26-           printf("b[%d][%d] = ", i, j);
27-           scanf("%d", &b[i][j]);
28-       }
29-   }
30
31   // Add both matrices
32-   for (int i = 0; i < rows; i++) {
33-       for (int j = 0; j < cols; j++) {
34-           sum[i][j] = a[i][j] + b[i][j];
35-       }
36-   }
37
38   // Display result
39   printf("\nResultant Matrix (Sum):\n");
40-   for (int i = 0; i < rows; i++) {
41-       for (int j = 0; j < cols; j++) {
42-           printf("%d\t", sum[i][j]);
43-       }
44-       printf("\n");
45-   }
46
47   return 0;
48 }
```

▲ 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
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8	10	12
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14	16	18
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=== Code Execution Successful ===