

```
#include <stdio.h>
```

```
// Function to add two matrices
```

```
void addMatrices(int mat1[][2], int mat2[][2], int result[][2], int rows, int 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 print a matrix
```

```
void printMatrix(int mat[][2], int rows, int 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[2][2] = {{1, 2}, {5, 3}};
```

```
    int mat2[2][2] = {{2, 3}, {4, 1}};
```

```
    int mat_sum[2][2];
```

```
    // Perform matrix addition
```

```
    addMatrices(mat1, mat2, mat_sum, 2, 2);
```

```
    // Print the result
```

```
    printf("Mat Sum =\n");
```

```
printMatrix(mat_sum, 2, 2);
```

```
return 0;
```

```
}
```