#include <stdio.h>

void main ()

{

static int array[10][10];

int i, j, m, n, a = 0, sum = 0;

printf("Enetr the order of the matix \n");

scanf("%d %d", &m, &n);

if (m == n )

{

printf("Enter the co-efficients of the matrix\n");

for (i = 0; i < m; ++i)

{

for (j = 0; j < n; ++j)

{

scanf("%d", &array[i][j]);

}

}

printf("The given matrix is \n");

for (i = 0; i < m; ++i)

{

for (j = 0; j < n; ++j)

{

printf(" %d", array[i][j]);

}

printf("\n");

}

for (i = 0; i < m; ++i)

{

sum = sum + array[i][i];

a = a + array[i][m - i - 1];

}

printf("\nThe sum of the main diagonal elements is = %d\n", sum);

printf("The sum of the off diagonal elements is = %d\n", a);

}

else

printf("The given order is not square matrix\n");

}

OUTPUT:

Enetr the order of the matix

3 3

Enter the co-efficients of the matrix

8 9 6

5 66 44

55 22 33

The given matrix is

8 9 6

5 66 44

55 22 33

The sum of the main diagonal elements is = 107

The sum of the off diagonal elements is = 127