Code, Compile & Run

Ide

Contest Code/Name (e.g. JULY15/PRACTICE) Problem Code/Name (e.g. TEST) Select

C (gcc 6.3) Code gets autosaved every second

```c
#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)
```

0.0

Open File ✓Custom Input Run

Custom Input

```
2 2
10 20
30 40
```

Status Runtime error **Date** 2020-06-16 14:53:06 **Time** 0 sec **Mem** 9.424 kB

Input

```
2 2
10 20
30 40
```

Output

```
Enetr the order of the matix
Enter the co-efficients of the matrix
The given matrix is
 10 20
 30 40

The sum of the main diagonal elements is = 50
```

Runtime Error

```
NZEC
```

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(i) Algorithm

Step 1 : Declare a matrix, taking order as input from users and define all its elements

step 2 : Declare two variable to store sum of each diagonal elements.

Step 3 : Run a for loop wherein the main diagonal element is given by index (i,i) where i is the iterator and opposite diagonal element is given by index (i, total_rows(m) - i - 1)

Step 4 : The two variables are initialized to 0, which are summed up by diagonal elements

Step 5 : Print the sum of diagonal elements.

Flowchart :