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>
 int main()
 {
int i, j, rows, columns, a[10][10], Sum;
printf("Please Enter Number of rows and columns : ");
scanf("%d %d", &i, &j);
printf("Please Enter the Matrix Row and Column Elements \n");
 for(rows = 0; rows < i; rows++)
{
for(columns = 0;
columns < j;
columns++)
{
scanf("%d", &a[rows][columns]);
 }
 }
 for(rows = 0; rows < i; rows++)
{
Sum = 0;
 for(columns = 0;
 columns < j;
 columns++)
 {
Sum = Sum + a[rows][columns];
 }
 printf("The Sum of Elements of a Rows in a Matrix = %d \n", Sum );
 }
return 0;
```

0:0

Open File | ✓Custom Input | Run

Custom Input

```
3 3
10 20 30
12 22 23
13 33 32
```

Status Successfully executed **Date** 2020-06-12 05:48:47 **Time** 0 sec **Mem** 9.424 kB

Input

```
3 3
10 20 30
12 22 23
13 33 32
```

Output

```
Please Enter Number of rows and columns : Please Enter the Matrix Row and Column Elements
The Sum of Elements of a Rows in a Matrix = 60
The Sum of Elements of a Rows in a Matrix = 57
The Sum of Elements of a Rows in a Matrix = 78
```

Priyanka. Shet
4AL19CS070

(i) Algorithm

step 1 : Start

step 2 : Declare & initialize a two-dimensional array a

step 3 : Calculate the number of rows & columns present in the array a and store it in variables rows and cols respectively.

step 4 : Maintain two variables sumRow & sumCol to store the sum of elements in the specific row & the sum of elements in specific column respectively.

step 5 : To calculate the sum of elements in each row
a) Two loops will be used to traverse the array where the outer loop selects a row, & the inner loop represents the columns present in the matrix a
b) calculate the sum by adding elements present in row
c) Display sumRow
d) Repeat this for each row.

step 6 : To calculate the sum of elements in each column:
a) Two loops will be used to traverse the array where the outer loop select a column and the inner loop represents the rows present in the matrix a.
b) calculate the sum by adding elements present in a column.
c) Display sumCol.
d) Repeat this for each column

step 7 : stop.

(ii) Flowchart :