

Aim

Find sum of each row and column in 2D array.

Algorithm

Traverse array row-wise for row sums, column-wise for column sums.

C Code

```
#include <stdio.h>

int main(){

    int a[3][3]={1,2,3},{4,5,6},{7,8,9}};

    int i,j;

    for(i=0;i<3;i++){

        int sum=0;

        for(j=0;j<3;j++) sum+=a[i][j];

        printf("Row %d sum = %d\n",i+1,sum);

    }

    for(j=0;j<3;j++){

        int sum=0;

        for(i=0;i<3;i++) sum+=a[i][j];

        printf("Col %d sum = %d\n",j+1,sum);

    }

    return 0;

}
```

Input

Matrix:

1 2 3

4 5 6

7 8 9

Output

Row 1 sum = 6

Row 2 sum = 15

Row 3 sum = 24

Col 1 sum = 12

Col 2 sum = 15

Col 3 sum = 18

Result

Row and column sums correctly computed.