

C program to implement sum of principle diagonal and secondary diagonal element.

### Algorithm

Step 1: start

Step 2:  $a=0$ ,  $sum=0$

Step 3: Enter order of matrix.  
read  $m, n$ .

Step 4: if  $(m \neq n)$ . // If false goto step 4.5

print "Enter the coefficient of matrix."

for  $(i=0; i < n; i++)$

{ for  $(j=0; j < n; j++)$ .

read  $array[i][j]$

}

4.1. print "The given matrix is  
output matrix element  $a[i][j]$ "

4.2. for  $(i=0; i < m; i++)$

{  $sum = sum + array[i][j]$

$a = a + array[j][m-i-1]$

}

4.3. print sum of main diagonal  
print sum

4.4. print sum of off diagonal  
print a

4.5. else.

print "The given order is not square matrix"

Step 5. stop

Flow chart .

