
Sum Frame of a Matrix

T54397_en

Let M be a square matrix $N \times N$. This matrix has different **frames**. Frame 0 is formed by rows 0 and $N - 1$ and columns 0 and $N - 1$. Frame 1 is formed by rows 1 and $N - 2$ and columns 1 and $N - 2$, excluding the parts that are part of frame 0, etc.

In the following example, you have that the frame 0 is formed by all the positions where there is a 0, the frame 1 the positions where there is a 1, and the frame 2 the positions where there is a 2:

```
0 0 0 0 0
0 1 1 1 0
0 1 2 1 0
0 1 1 1 0
0 0 0 0 0
```

You must implement the function `int sumaMarc(const Matriu& m, int x);` with the following specification:

PRE: m a matrix $N \times N$ and $0 \leq x < N/2 + (N \bmod 2)$.

POST: Returns the **sum** of the elements of the **frame** x of M .

Observation

You only need to send the function we ask for and the functions you define. The rest will be ignored.

Input

A matrix $N \times N$ and $0 \leq x < N/2 + (N \bmod 2)$.

Output

The **sum** of the elements of the **frame** x of M .

Sample input 1

```
5
1 1 1 1 1
1 2 2 2 1
1 2 3 2 1
1 2 2 2 1
1 1 1 1 1

0
1
2
```

Sample output 1

```
El marc 0 suma 16
El marc 1 suma 16
El marc 2 suma 3
```

Sample input 2

```
4
1 2 3 1
2 1 3 2
2 3 5 3
1 2 2 1

0
1
```

Sample output 2

```
El marc 0 suma 22
El marc 1 suma 12
```

Sample input 3

```
6
1 1 1 1 0 7
1 0 2 2 2 1
4 2 3 5 2 2
1 2 0 3 0 1
1 1 2 2 2 1
1 1 1 1 1 0

0
1
2
```

Sample output 3

```
El marc 0 suma 28
El marc 1 suma 19
El marc 2 suma 11
```

Problem information

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