

Diagram illustrating a 2D array with indices  $i$  and  $j$  and a sum value.

	$j$		
	0	1	
sum	0	1	2
$i$ 0	11.	12.	13.
$i$ 1	21.	22.	23.

Arrows indicate the path from (0,0) to (1,1) and (1,0) to (0,1). A red box highlights the cell (1,1) which contains the value 22.

$m$  rows  
 $n$  columns

Sum = 2  
 $i$  keep decreasing  
 starting from  $\text{Math.min}(\text{sum}, m-1)$

Diagram illustrating a 2D array with indices  $i$  and  $j$  and a sum value.

	$j$		
	0	1	
sum	0	1	2
$i$ 0	1.	2.	
$i$ 1	3.	4.	
$i$ 2	5.	6.	
$i$ 3	7.	8.	

Arrows indicate the path from (0,0) to (1,1) and (1,0) to (0,1). A red box highlights the cell (3,1) which contains the value 8.

$m$  rows  
 $n$  columns

Sum = 2  
 $j$  keep decreasing  
 starting from  $\text{Math.min}(\text{sum}, n-1)$