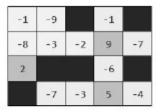
Positive converts negative to be positive:

Given a M x N matrix of integers whose each cell can contain a negative, zero or positive value, code to find the minimum number of passes required to convert all negative values in the matrix to positive.

Only a non-zero positive value at cell (i, j) can convert negative values present at its adjacent cells (i-1, j), (i+1, j), (i, j-1), and (i, j+1) i.e. up, down, left and right.

For example, below matrix needs 3 passes as demonstrated below:



Input Matrix

-1	-9		1	
8	-3	2	9	7
2			6	
	-7	3	5	4

1	-9		1	
8	3	2	9	7
2			6	
	7	3	5	4

1	9		1	
8	3	2	9	7
2			6	
	7	3	5	4