QUERY BOARD

CHALLENGE DESCRIPTION:

There is a board (matrix). Every cell of the board contains one integer, which is **0** initially.

The next operations can be applied to the Query Board:

SetRow i x: it means that all values in the cells on row "i" have been changed to value "x" after this operation.

SetCol j x: it means that all values in the cells on column "j" have been changed to value "x" after this operation.

 $\label{eq:QueryRow} \textbf{i} : \text{it means that you should output the sum of values on row "i"}.$

QueryCol j: it means that you should output the sum of values on column "j".

The board's dimensions are 256x256 "i" and "j" are integers from 0 to 255 "x" is an integer from 0 to 31

INPUT SAMPLE:

Your program should accept as its first argument a path to a filename. Each line in this file contains an operation of a query. E.g.

SetCol 32 20
SetRow 15 7
SetRow 16 31
QueryCol 32
SetCol 2 14
QueryRow 10
SetCol 14 0
QueryRow 15
SetRow 10 1
QueryCol 2

OUTPUT SAMPLE:

For each **query**, output the answer of the query. E.g.

5118 34 1792 3571