



Level 2



Glados:

That's not bad, greeny, but even a kid can do that. Let's see how you do next.

You'll have to keep track of all the visited points.

Task for Level 2:

Generate a list of all the points visited by an alien who follows a path as described in the previous level



Level 2

- › The world is a 2D grid consisting of square cells
- › The bounds of the world are at (0,0) and (WX,WY) meaning $x \in [0, WX)$, $y \in [0, WY)$
- › The size of the grid is given in input
- › Aliens movements are exactly as described in the previous level

Input format:

<WX> <WY>

<X> <Y>

<COMMAND> <STEPS> <COMMAND> <STEPS> ...

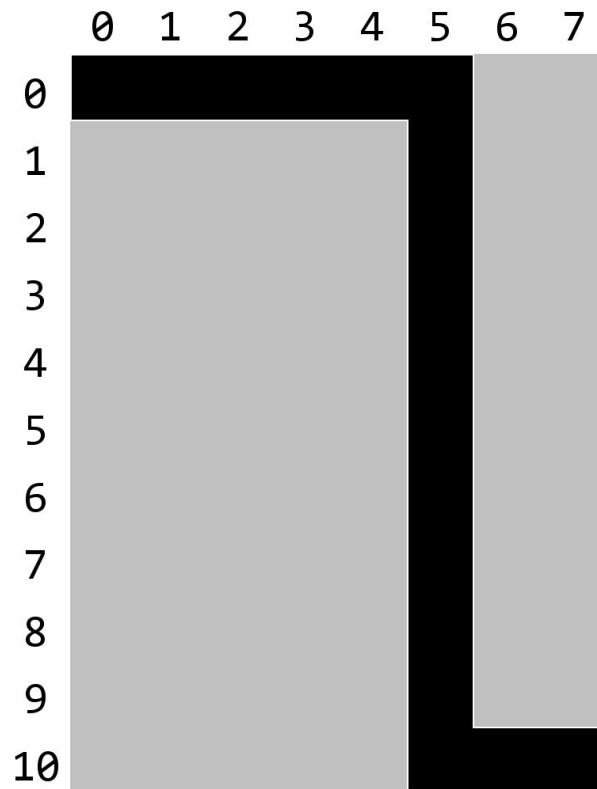
Output format:

<x> <y>

<x> <y>

<x> <y>

.....



Example

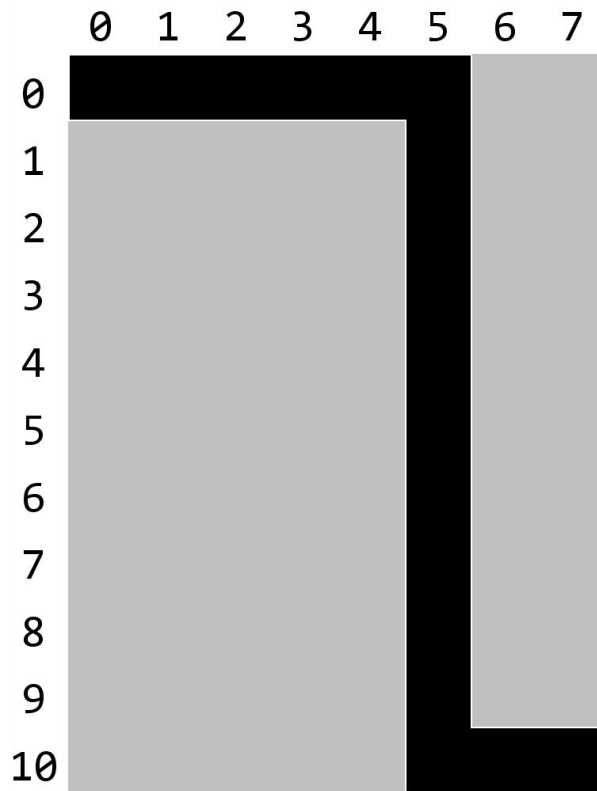
Starting at (0,0) with a board size of 8x11

Input sequence:

8 11

0 0

F 5 T 1 F 10 T 3 F 2





Example

Output:

0	0
1	0
2	0
3	0
4	0
5	0
5	1
5	2
5	3
5	4
5	5
5	6
5	7
5	8
5	9
5	10
6	10
7	10

