Amano Challenge - Amano Bot

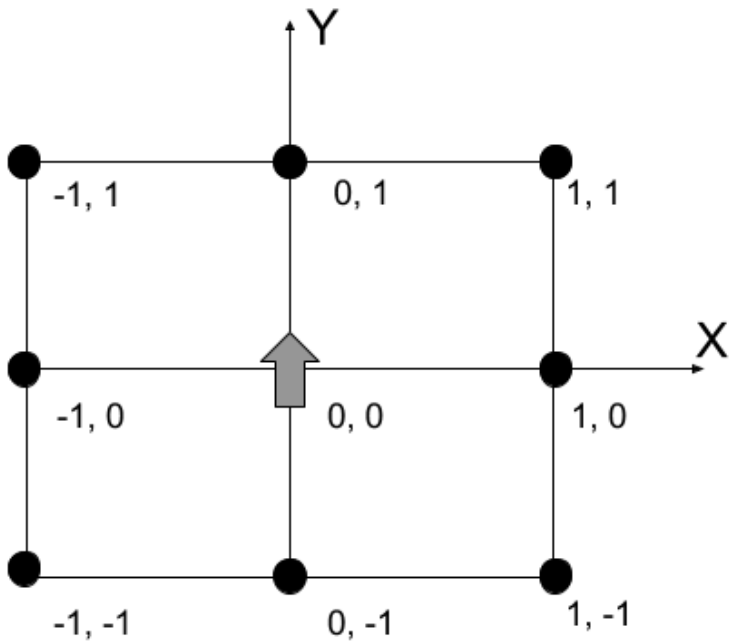
Time: 30 minutes recommended.

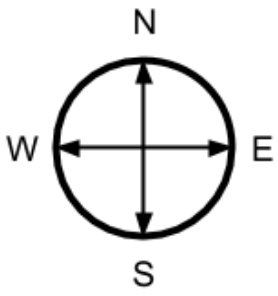
Amano has built a robot called Amano Bot which walks in 2-dimensional plane (X, Y coordinate). It can only turn left or right, and walk straight. It also knows of its current position (X, Y) as well as its direction (North, East, West and South). In order to command Amano Bot to walk, it must be input with a walking command. The walking command can be represented with a string consisting of three alphabets **R, L** and **W** and a positive integer N to indicate the distance of how many positions it has to walk which can be explained as follows:

> **R:** Turn 90 degree to the right of Amano Bot (clockwise)
> **L:** Turn 90 degree to the left of Amano Bot (counterclockwise)
> **WN:** Walk straight for **N** point(s) where **N** can be any positive integers. For example, **W1** means walking straight for 1 point.

Initial Conditions:

> Amano Bot starts at the position (X, Y) of 0, 0
> Amano Bot is facing up North





For example, the walking code of RW15RW1 means

```
Amano Bot starts at 0, 0 facing up North.
Amano Bot turns right (facing East) and walk straight 15 positions.
Amano Bot turns another right (now facing South) and walk straight 1 position.
```

Your task is to create a command-line based script in any programming language of your choice. The script accepts a command line argument as an input string of the walking code and print out the result of the last position (X, Y) of Amano Bot and its last facing direction (North, East, West or South).

Note that the output is case-sensitive.

A sample of a running script in a terminal with the input of RW15RW1:

> php amanobot.php RW15RW1
> node amanobot.js RW15RW1
>
> X: 15 Y: -1 Direction: South

Sample of Test Data:

W5RW5RW2RW1R
RRW11RLLW19RRW12LW1
LLW100W50RW200W10
LLLLLW99RRRRRW88LLLRL
W55555RW555555W444444W1

Feel free to use the internet to look up any coding references, but please do not use AI or ask anyone else for help. We want to see how you code.