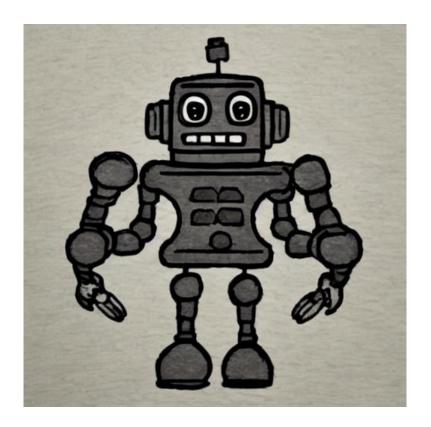
Robot Control

We need a control system for the robots that inhabit our 100 by 100 grid world. The coordinates of our world are 0 based and the world wraps so grid coordinates 0 and 99 are adjacent. The origin is bottom left.



Initial Location

Each robot starts with a simple compass heading N, S, E, W and a grid coordinate, X, Y.

The Commands

The robot is controlled with a set of simple commands.

M - Move Forward

L - Rotate 90° Left

R - Rotate 90° Right

Each command may be followed by a number from 1-100. Which indicates the number of times to perform the action. Absence of a number is equivalent to 1

The Input

A single file is used for input. The first line of the file is the initial position, the second is the sequence of commands. Additional lines are ignored.

The Output

The control system should print the final position of the robot to std out.

Example

N 0 0

M1RM4L3M2