

Bare Code Test / Interview Process

Instruction:

- write code to solve the problem below as this was production code, putting as much effort and care as you would for production code, no less, no more.
- We need instruction on how to run what you provide, but do not expect a docker image or anything related to infrastructure. For example:
 - require Ruby 3.0 or later
 - install dependencies with XXXX
 - run with “ruby my_code.rb”

Problem:

The application is a simulation of a robot moving on a 6x6 square grid.

- There are no obstructions on the grid.
- The robot needs to be prevented from exceeding the limits of the grid, but is allowed to move freely on the grid otherwise.

Create a command-line application that reads in the following commands:

- PLACE X, Y, O
- MOVE
- LEFT
- RIGHT
- REPORT

The PLACE X, Y, O will place the robot at position X, Y on the grid, with orientation O. Orientations are N, E, S, W (for North, East, South and West). Position (0,0) on the grid is the south west corner. First coordinate is along the East/West axis, the second coordinate is along the North/South axis.

MOVE will move the robot one step forward, in whichever direction it is currently facing

LEFT and RIGHT respectfully turn the robot 90° angle to the left or to the right.

REPORT announces the position and orientation of the robot (X, Y, O) in any format (such as standard out)

Constraints

- Commands are to be ignored until a valid PLACE command is issued
- Any commands that would put the robot out of the defined grid is to be ignored, all other commands (including another PLACE) are to be obeyed

Example

PLACE 0,0,E
MOVE
REPORT
Output: 1,0,E

PLACE 0,0,N
MOVE
MOVE
RIGHT
MOVE
REPORT
Output: 1,2,E