Beefy Robot Simulator
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Description

- The application is a simulation of a small robot named Beefy moving on a square tabletop, of
dimensions 5 units x 5 units.

Create an application that can read in commands of the following form:

    PLACE X,Y,F
    MOVE
    LEFT
    RIGHT
    REPORT

- PLACE will put Beefy on the table in position X,Y and facing NORTH,
  SOUTH, EAST or WEST.
- The origin (0,0) can be considered to be the SOUTH WEST most corner.
- The first valid command to Beefy is a PLACE command, after that, any
  sequence of commands may be issued, in any order, including another PLACE
  command. The application should discard all commands in the sequence until
  a valid PLACE command has been executed.
- MOVE will move Beefy one unit forward in the direction it is
  currently facing.
- LEFT and RIGHT will rotate Beefy 90 degrees in the specified direction
  without changing the position of the robot.
- REPORT will announce the X,Y and F of Beefy. This can be in any form,
  but standard output is sufficient.
- When Beefy is not on the table he can choose the ignore the MOVE, LEFT, RIGHT
  and REPORT commands.
- Input can be from a file, or from standard input, or as you choose.
- Provide test data to exercise the application.

Constraints

- Beefy must not fall off the table during movement. Any movement that would result in Beefy falling
from the table must be ignored. This also includes the initial placement. Further valid movement
commands must still be allowed.
- Assume that there are no obstructions on the table surface.

Example Input and Output

Example a

    PLACE 0,0,NORTH
    MOVE
    REPORT

Expected output:

0,1,NORTH

Example b

    PLACE 0,0,NORTH
    LEFT
    REPORT

Expected output:

    0,0,WEST

Example c

    PLACE 1,2,EAST
    MOVE
    MOVE
    LEFT
    MOVE
    REPORT

Expected output

    3,3,NORTH

Deliverables

- The Ruby source files, the test data and any test code.
- The git repository. Please commit to a local git repo.
- Provide it all in one archive file including the .git directory.

It is not required to provide any graphical output showing the movement of
the toy robot.

This is based on work by Jon Eaves.