



Introduction to Programming with Java

Task: PaintX

Prerequisites: SuperKarel

Description:

Karel is very much interested in geometry and wonders how to paint the diagonals of a square which looks like an X. Karel needs your help to point him in the correct directions.

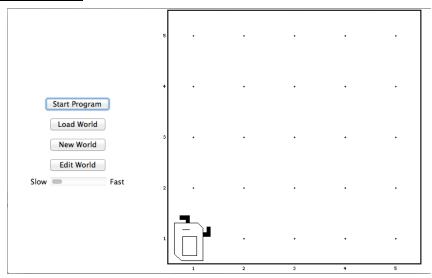
Assumptions:

- Karel will always start at the origin(1,1) and might be facing towards any direction.
- World size can be (2k+1)x(2k+1) where k > 0. So it can be 3x3,11x11 etc.
- Karel must paint the X by choosing randomly from Red, Green, Blue colors for each corner. Karel should pick each color with equal probability.(So each color has approximately 0.33 probability)
- The final location and facing of Karel is not important.

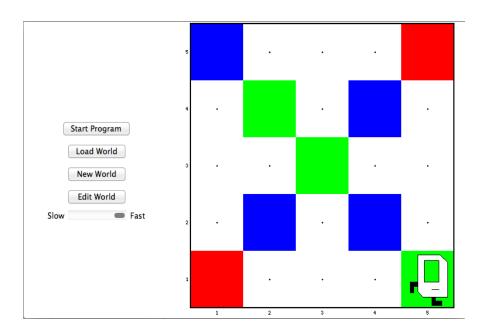
Hint: Use helper methods to decompose the problem into subtasks, wherever appropriate.

Sample Run(1):

Initial State:



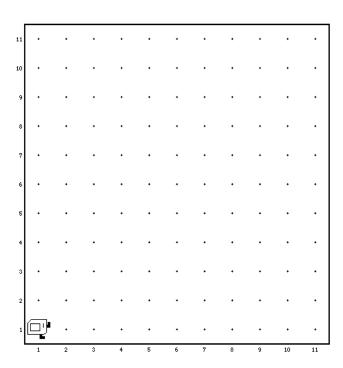
Final State:



Sample Run(2):

Initial State:





Final State:



