|  |  |
| --- | --- |
| **CS108L Computer Science for All**  **Weeks 1 and 2: NetLogo Command Cheat Sheet** | |
| **Command** | **Command Description** |
| to <name> | Statement used to name and start a procedure  **Example***:* ***to setup*** |
| end | Statement used to end a procedure |
| clear-all | Deletes all turtles and resets all patches to default values |
| create-turtles # | Creates the specified number of turtles at origin and gives a random heading to each turtle  **Example**: ***create-turtles 1*** |
| ask turtles […..] | Asks the turtles to perform the instructions (commands) given in square brackets. Each turtle performs the instructions one at a time.  **Example**: ***ask turtles***  ***[forward 1]*** ;; asks all the turtles to move forward 1 step |
| forward # | Tells an agent to move forward a number of patches  **Example**: ***forward 1*** |
| back # | Tells an agent to move back a number of patches  **Example**: ***back 1*** |
| pen-down | Tells an agent to put its pen down to draw a trail |
| pen-up | Tells an agent to pick up its pen and stop drawing a trail |
| setxy # # | Move the turtle to the x-coordinate and y-coordinate given  **Example**: ***setxy 10 20*** ;; moves the turtles to patch 10 20 |
| set heading # | Sets heading or direction that the agent faces in degrees relative to the Netlogo coordinate system  **Example**: ***set heading 90*** |
| right # | Asks the turtle to turn right a certain number of degrees relative to the direction the turtle is facing  **Example**: ***right 90*** |
| left # | Asks the turtle to turn left a certain number of degrees relative to the direction the turtle is facing  **Example**: ***left 90*** |
| clear-turtles | Removes all the turtles without erasing the NetLogo surface or changing the patches |
| set color *color\_name* | Specifies or changes the color of the turtles to the specified color (color\_name). Some possible color names include red, blue, green, orange, yellow, pink, magenta, lime, gray, and violet.  **Example: set color red** |
| set size # | Specifies or changes the size of the turtles to a specified number (#). The default is 1.  **Example: set size 3** |
| set pen-size # | Specifies or changes the size of the pen the turtles carry to a specified number (#). The default is 1.  **Example: set pen-size 3** |
| Ask turtle # [ ] | Asks a specific turtle to perform the commands in brackets. |