Assignment 0

Model 1:- Fire

I have selected Fire model as first model for this assignment. The first thing that I noticed in this model is when I set the density to 63% percent on the first try it burns 90.3% of the forest. But with the same density if I set up the forest again there will be a difference in the forest burnt due to the random placement of the trees. With same density and different setups, the burnt part has very little difference in each run. Things that I tried was I changed the value of max-pxcor and max-pycor which changed the size of the board on which the trees and placed. Increase in the value of max-pxcor increases the size of the board horizontally and increase in the value of max-pycor increases the board size vertically.

Model 2:- Birthdays

The second model that I chose is Birthdays. Birthdays is a model that is purely based on probability. It defines the probability of two persons having same birthdays from a room of 23 people. The probabilities that I expected were lower than what I can see in this model. I expected it to be less than 50% but it is always greater than it. When I edited the view and increased the value of maxpycor, the probability increased. There must be minimum of 45 people in a room in order to get the probability of two having the same birthday more than 90%. If there are exactly 367 people in a room then the probability will be 100%.

Model 3:- Wandering Letters

The Third model that I selected is Wandering letters. The letter from the word only knows that which letter is there before it and the size of the word with that letter. Then I tried to change the margin and increased it. The space for the words was not enough so the letters were overlapping each other in the last line. With the increase in line spacing slider, there is increase in the gap between the lines. And if there is no space below the lines, it starts overlapping itself. While pressing the scatter button, it scatters the letters of the word to random positions on the board. I have also extended this model which accepts the user input and scatters all the words and will be displayed after the default lines. I have also made a condition that checks the space in user input line and does not consider it as new line. Here are some screenshots for extended model:-

* Wandering Letters - NetLogo (/home/dhruvin/Desktop/Artificial Intelligence/Assignments/Assignment1)

File Edit Tools Zoom Tabs Help

Interface Info Code

Edit Delete Add   Button ▾   normal speed   ☑ view updates   Settings...
                    ticks: 804   on ticks ▾

Setup   Go

Scatter Letters

The string_input text
will be placed after the
default text form on the
board.

line-spacing   2
left-margin   5
right-margin   5

string_input   Change

My name is Dhruvin.
This is Artificial Intelligence.
123().

These are the
times that try
men's souls. The
quick brown fox
jumped over the
lazy dog. Pack
my box with five
dozen liquor
jugs My name is
Dhruvin. This is
Artificial Intel
ligence. 123().

Command Center   Clear

observer>