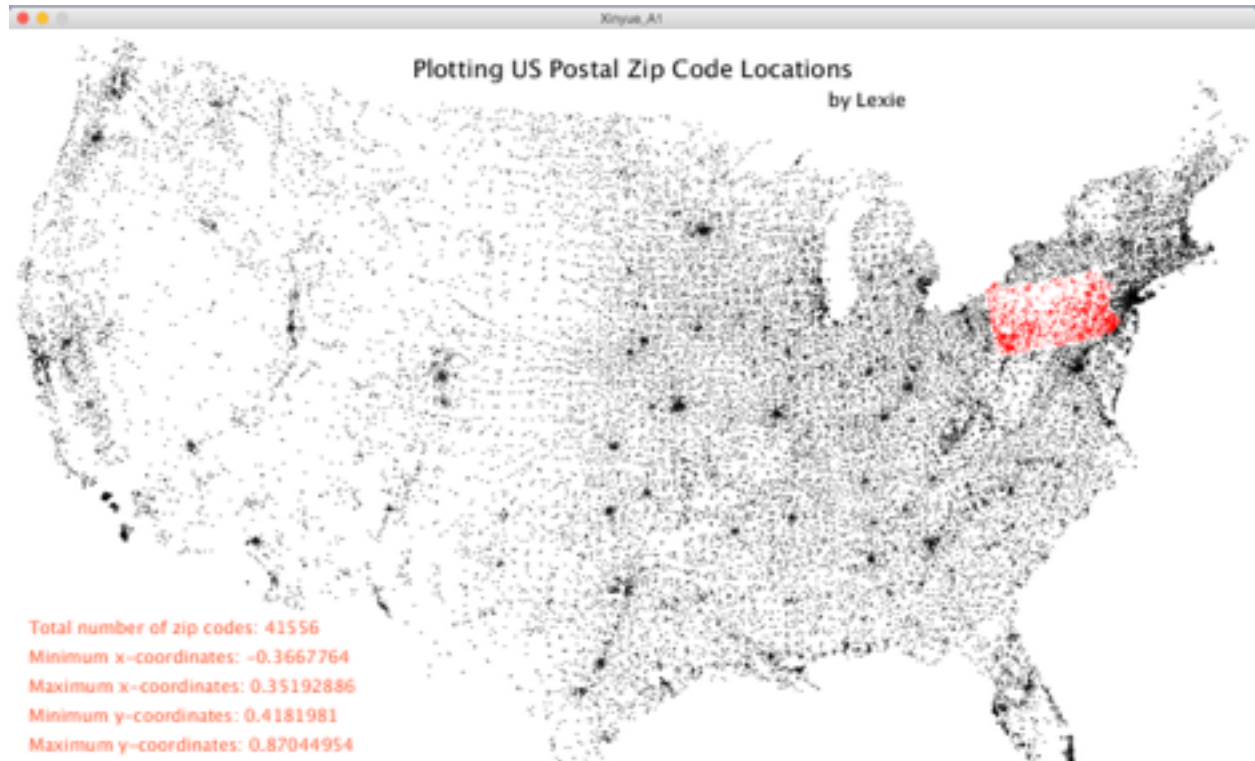Xinyue (Lexie) Zhang
CS 206
Professor Cooper
Sep 8th, 2015

Assignment I

TITLE: Plotting US Postal Zip Code Location

Short Description:

Read in the data about all the postal zip codes in the 48 contiguous states of the US and Plot

the geo-location of each zip code on the 2-dimensional processing console. For those zip codes

in the state of Philadelphia, the plotted points are red.

More Detailed Description:

For the first assignment, I plotted out all the zip code locations in US and reviewed what I learnt last semester in the Processing programming language, including topics of arrays, class, string operations, file input and data parsing, mapping and visualization.

For my coding procedures, I first downloaded the file provided for the assignment, copy them into my textEditor and save as a txt file. I start by setting up the sketch window and add a title at the top. Based on my knowledge in OOP programming, I defined the class Place with data fields, constructor and the method draw() as expected. In the draw function, I add an if statement selecting the state "PA" and change the stroke into red as stated. Then, I make good use of the map function to map the x, y coordinates from its real life scale to my desired proportions in the processing console.

Furthermore, based on what I learnt about arrays and data processing, I load the data, set up the array of place objects, split the data in the first line, which starts with a "#" at the beginning (Here I split twice. The first time using "# ", and the second time using ",") and I print out those information in the first line of the data in the console as well as showing them at the lower left corner of the canvas. Then, I continue splitting the data (Again, I split twice, The first time using "\t" and the second time using ", " to split the town and state) and storing relevant data into an array of place objects, using the constructor of each place object. Later, using a for loop, I call the draw method for each place object and draw the location, based on the x,y coordinates, of its zip code. Finally, I add a title and the author at the top of the console.

Overall, I strengthened my coding skills with the data processing and visualization, and reviewed the main topics of Arrays, Class, and String. I dedicated a lot to and really enjoyed this project.