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CS 206
Professor Cooper
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Assignment III

TITLE: Searching US Postal Zip Code Locations

Short Description:

This program reads the file from "Xinyue_A3.txt" using `java.util.Scanner`, parse the data and save the zipcode, town and states into an array of `Place` objects. Then it asks user for a given zipcode, check its validity, then search it inside the `Place[]` array and returns the location to the user as well as printing out all the interactions in the Console Output. In addition, this program compares the time used by linear search and binary search and print them out in the console.

More Detailed Description:

I started Assignment 3 before the third lab was handed, so I already had a runnable program by then. Originally, I coded the `readData` and `search` part all inside the `main` method in my main class, which made the code quite messy. After doing this lab, I separate `readData` and `search` out into two functions, so I just need to call them in the `main` method. This lab reminds me of the importance of functions while designing how to program.

Overall, I don't have a lot of trouble with the main project and I found this project a very good exercise to the Object Oriented Programming. However, I do find the extra credit part a little challenging, mainly because I was quite confused by the instruction at first. Later on, when professor updated the new version, I searched a lot of examples among java documentation and `stackoverflow` and finally figured everything out.