How To Run:

To create the jgr file please run python formatInput.py

The python script takes up to three parameters

-a Followed by the name of the city or the string: TNMap

The name of a city – Output the city on a map with other cities near it

TNMap – Outputs the jgr containing the picture of Tennessee

-b

The name of the second city. There needs to be a -a with this. The output jgr will

Will contain both cities and the distance between those cities

-z

When you specify only one city (-a) you can zoom in and zoom out from that city.

The zoom is in degrees so please input from .1 to 1 for best results.

The standard output of the python script is a jgr file. The script also write to a file map.jgr

The Output can be used as the input of jgraph to create a PS file

You can convert the PS file to a PDF using ps2pdf

Description:

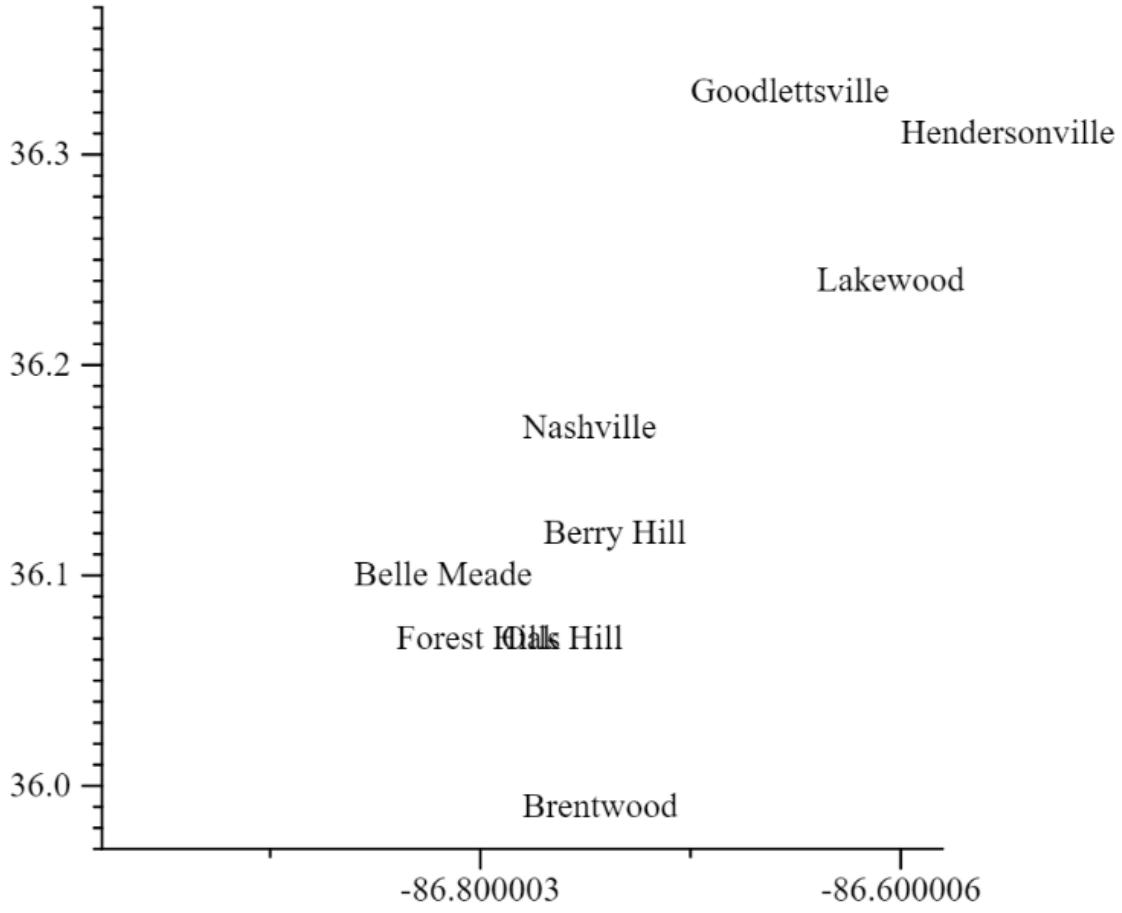
My program creates a map of all the cities in Tennessee. The user can specify which city they wish to center on. The user can also specify a zoom value which zooms in and out from the city they specified. The user can specify two cities to get the distance in miles from those two cities and their location on the map. Finally, the user can specify the city as TNMap which will output a picture of the Tennessee map. The examples below will further explain the program with pictures.

Example Runs:

I am using pipes to direct input and output

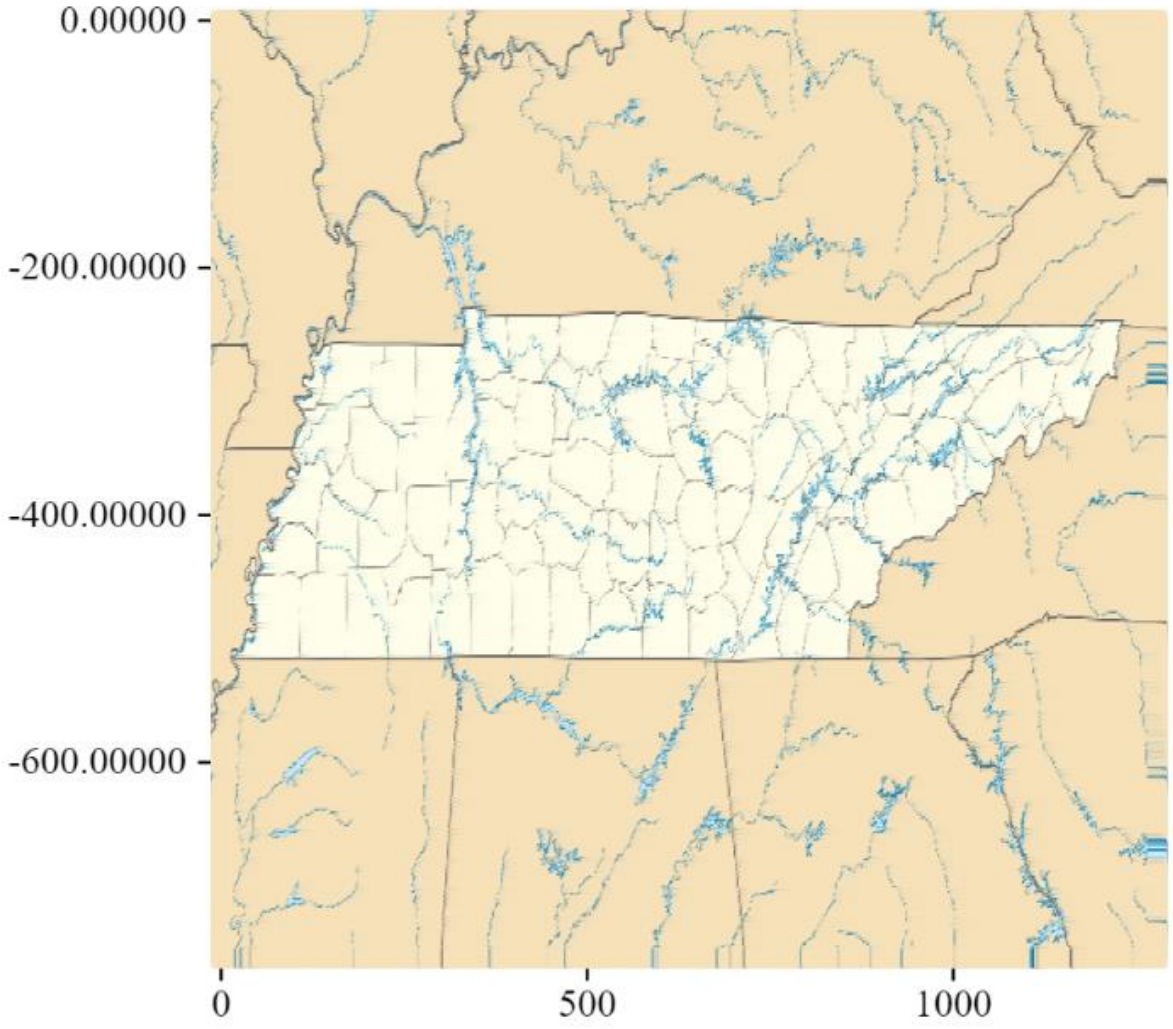
python formatInput.py -a Nashville | ./jgraph -P | ps2pdf - map1.pdf

Centers on Nashville with a default zoom of .2



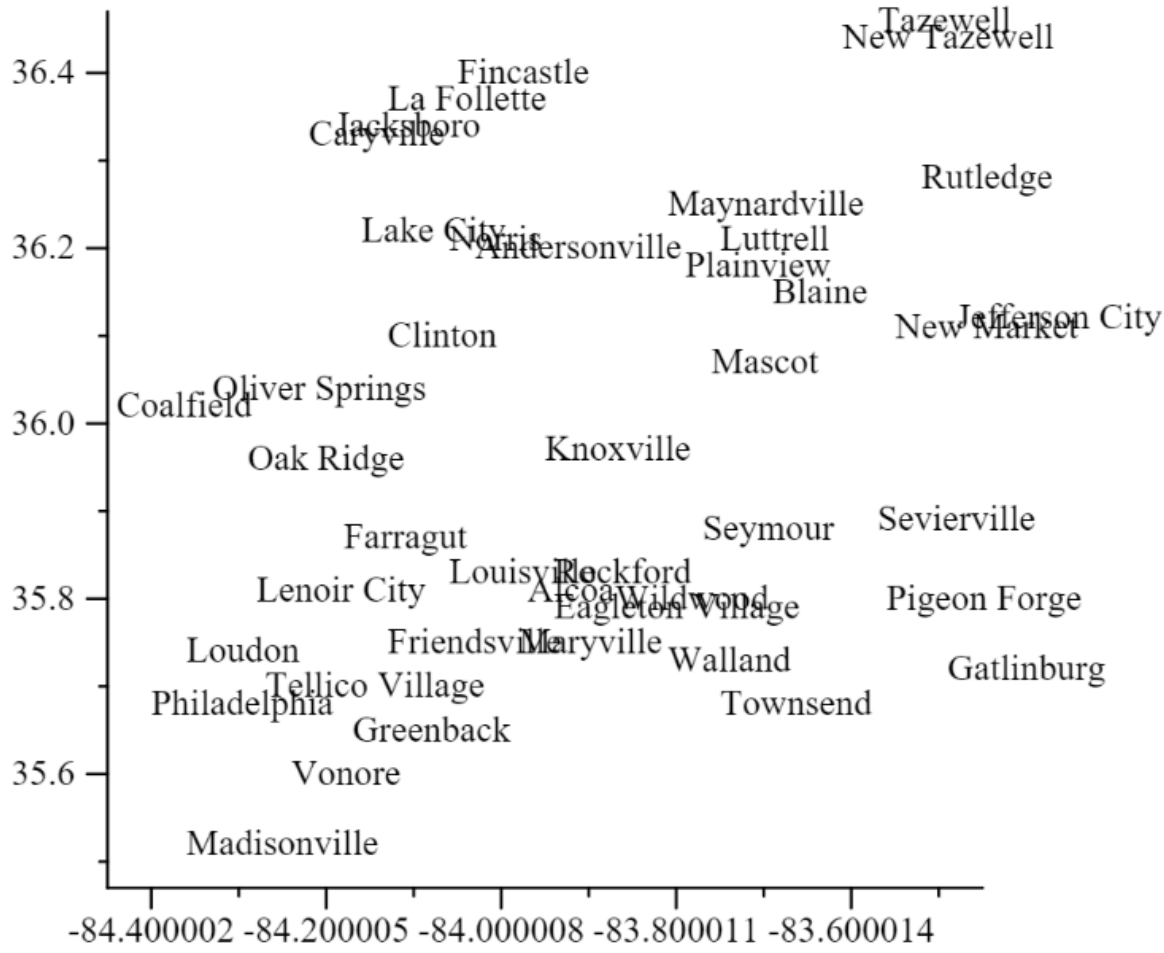
python formatInput.py -a TNMap | ./jgraph -P | ps2pdf - map2.pdf

Outputs the picture of the map of Tennessee



python formatInput.py -a Knoxville -z .5 | ./jgraph -P | ps2pdf - map3.pdf

Outputs the city of Knoxville with a zoom of .5



python formatInput.py -a Knoxville -b Nashville | ./jgraph -P | ps2pdf - map4.pdf

Outputs the distance between Knoxville and Nashville