

Final Project: Dealing with Data

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What?

We are determining whether we should open a new restaurant serving a certain kind of food in Times Square or not depending on how close similar restaurants are.

Why?

There are 308 restaurants in Times Square (as recorded to date in the NYC Open Data), so if you to make a restaurant, you should know your competition.

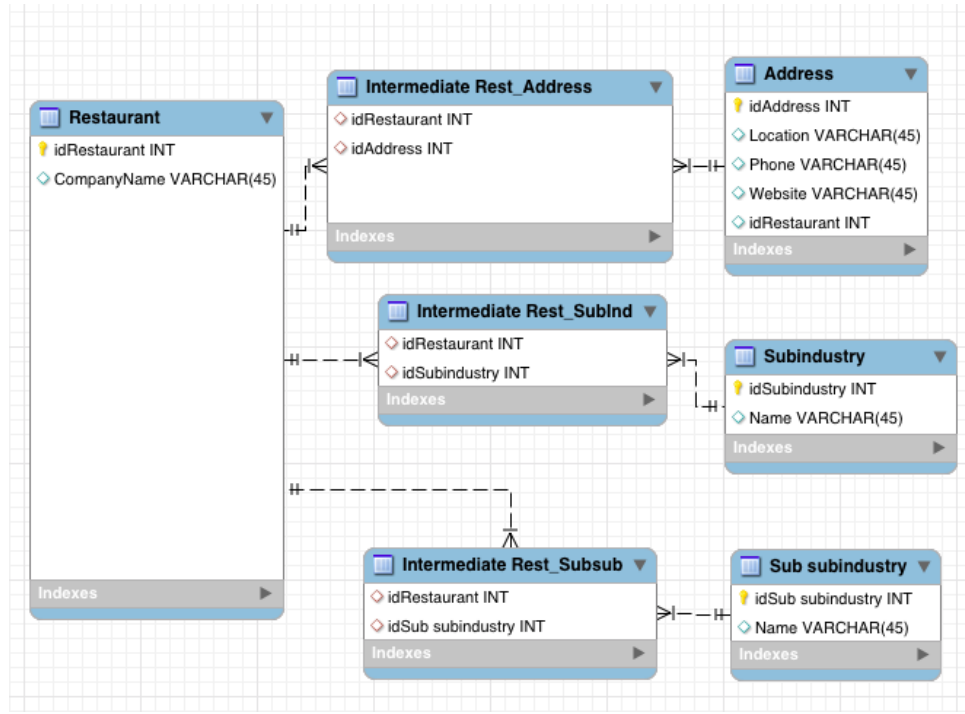
How?

We downloaded the data from NYC Open Data on the Times Square Food & Beverage Locations.

(
<https://data.cityofnewyork.us/Business/Times-Square-Food-Beverage-Locations/kh2m-kcyz>
)

How?

We imported all the data to mySQL, and created the schema.



How?

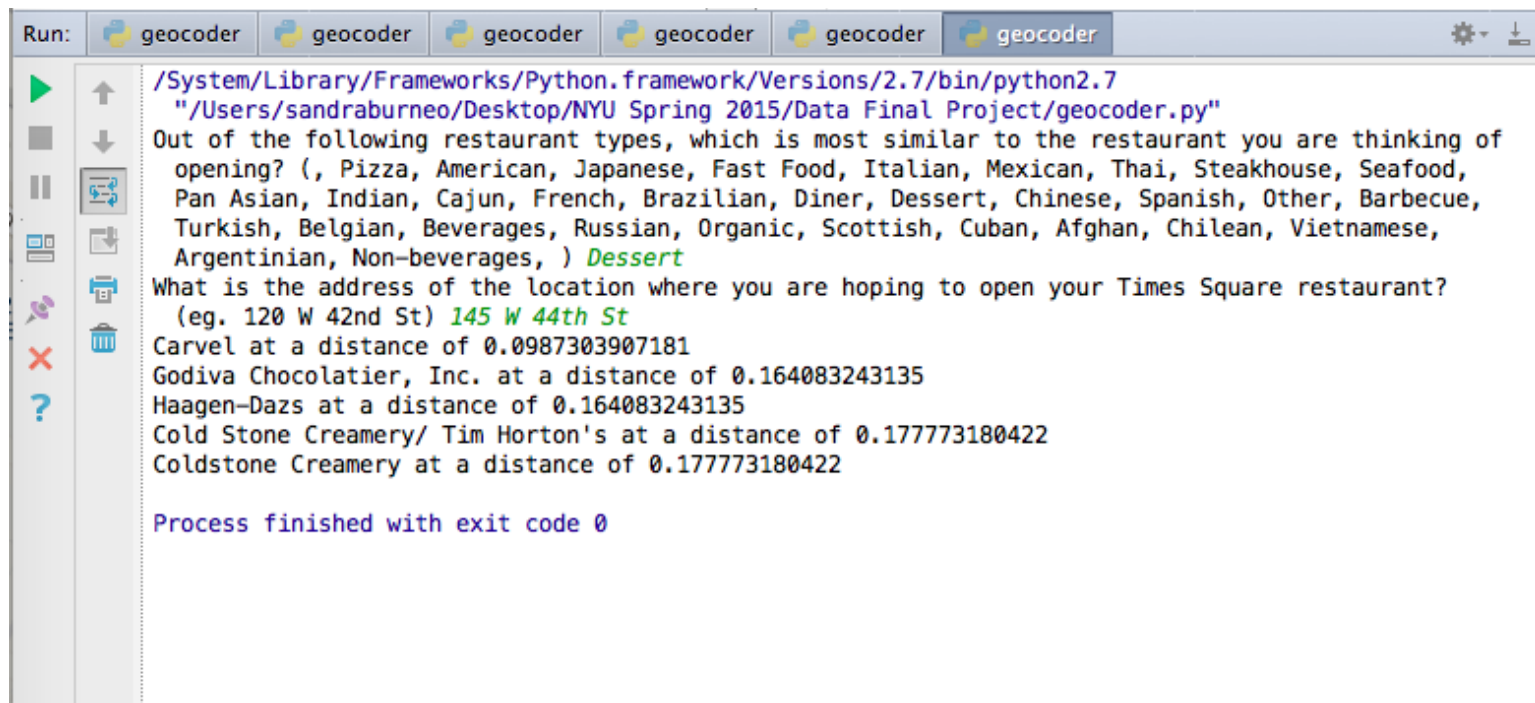
We converted the addresses of the locations into geolocations (coordinates) with Google Maps API.

With Python, we also calculated the distance between geolocations. This is the direct distance between the coordinates.

How?

Using Python, we let users input the location and type of food to filter through the database, returning the five closest restaurants serving the same type of food, the distance in relation to the input location and the graph of the distance.

How?

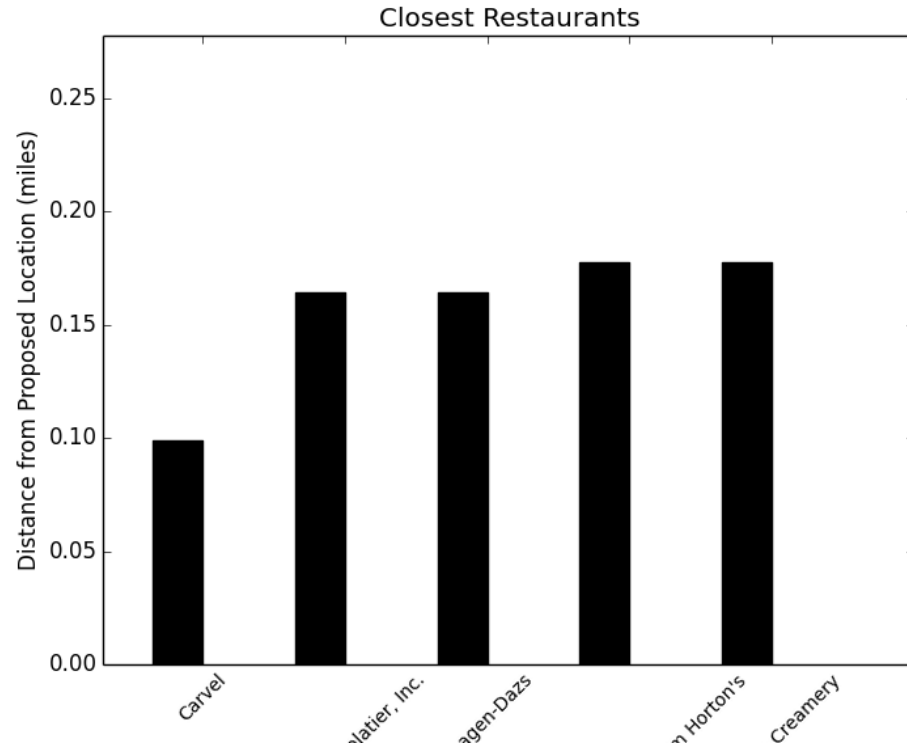


The screenshot shows a Python IDE with a terminal window titled "Run:". The terminal displays the execution of a script named "geocoder.py". The script's path is shown as `/System/Library/Frameworks/Python.framework/Versions/2.7/bin/python2.7 "/Users/sandraburneo/Desktop/NYU Spring 2015/Data Final Project/geocoder.py"`. The output of the script includes a list of restaurant types, a prompt for a location address, and a list of nearby restaurants with their distances. The script finishes with an exit code of 0.

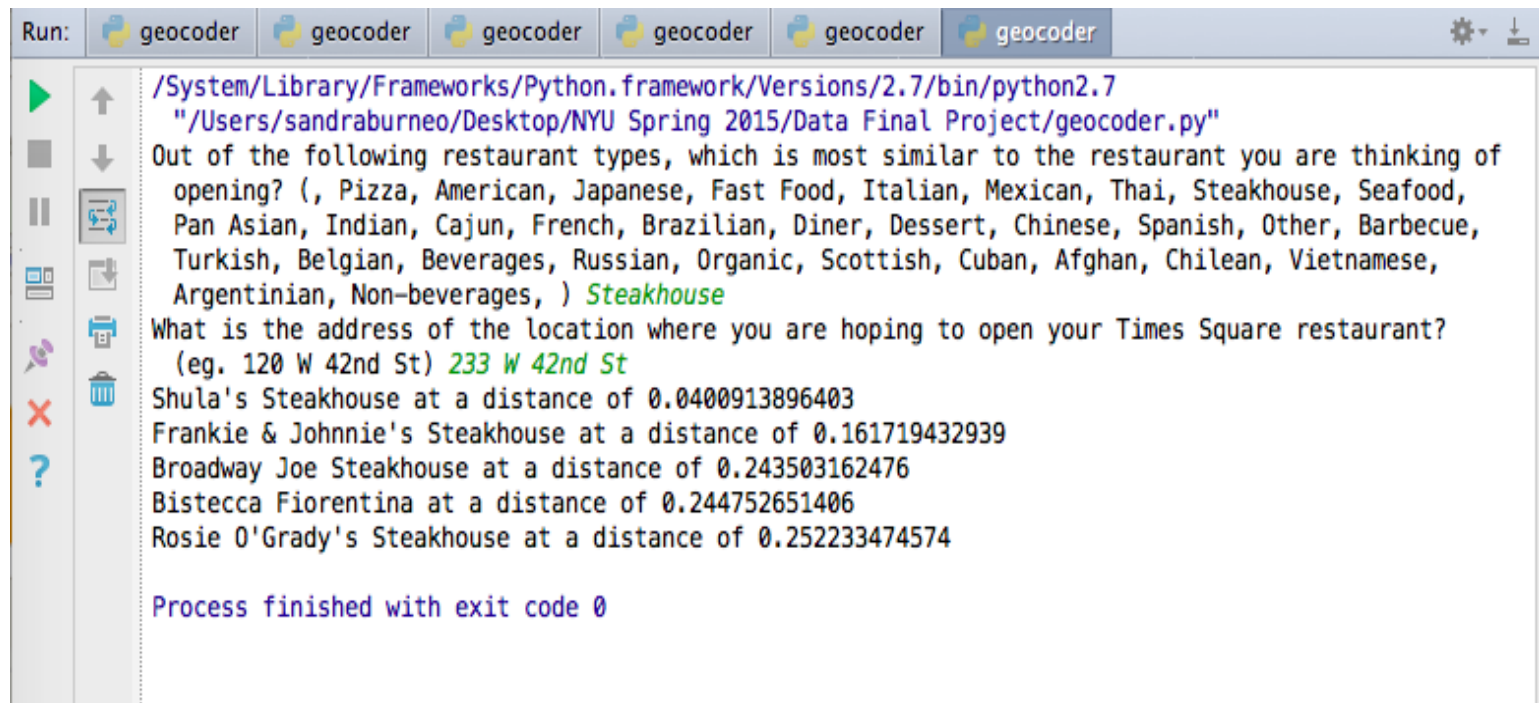
```
Run: /System/Library/Frameworks/Python.framework/Versions/2.7/bin/python2.7
      "/Users/sandraburneo/Desktop/NYU Spring 2015/Data Final Project/geocoder.py"
Out of the following restaurant types, which is most similar to the restaurant you are thinking of
opening? (, Pizza, American, Japanese, Fast Food, Italian, Mexican, Thai, Steakhouse, Seafood,
Pan Asian, Indian, Cajun, French, Brazilian, Diner, Dessert, Chinese, Spanish, Other, Barbecue,
Turkish, Belgian, Beverages, Russian, Organic, Scottish, Cuban, Afghan, Chilean, Vietnamese,
Argentinian, Non-beverages, ) Dessert
What is the address of the location where you are hoping to open your Times Square restaurant?
(eg. 120 W 42nd St) 145 W 44th St
Carvel at a distance of 0.0987303907181
Godiva Chocolatier, Inc. at a distance of 0.164083243135
Haagen-Dazs at a distance of 0.164083243135
Cold Stone Creamery/ Tim Horton's at a distance of 0.177773180422
Coldstone Creamery at a distance of 0.177773180422

Process finished with exit code 0
```


How?



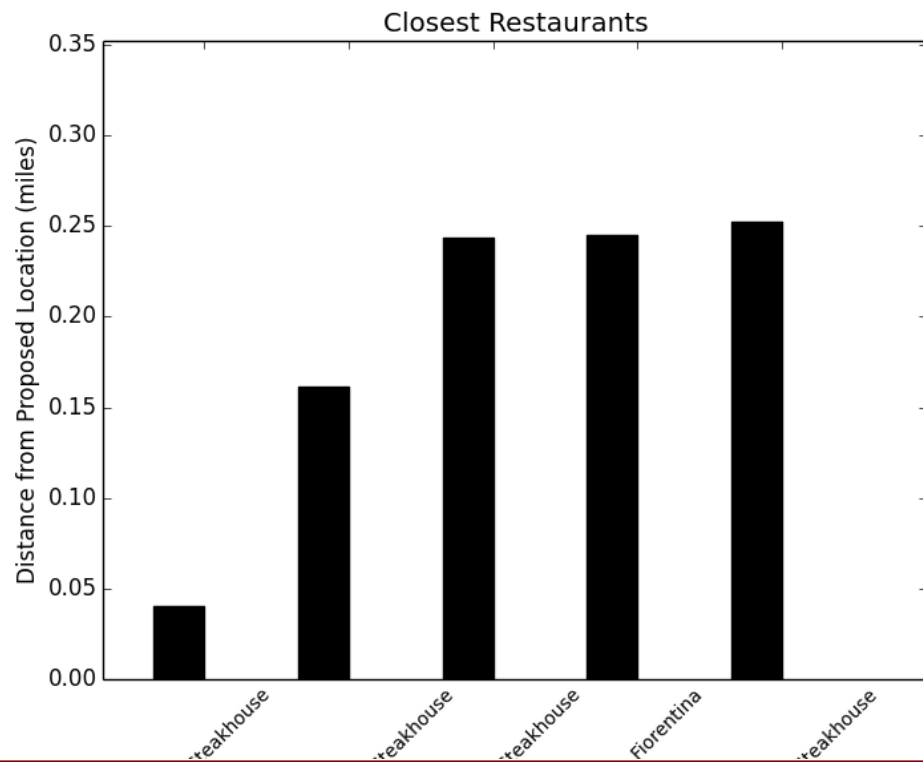
How?



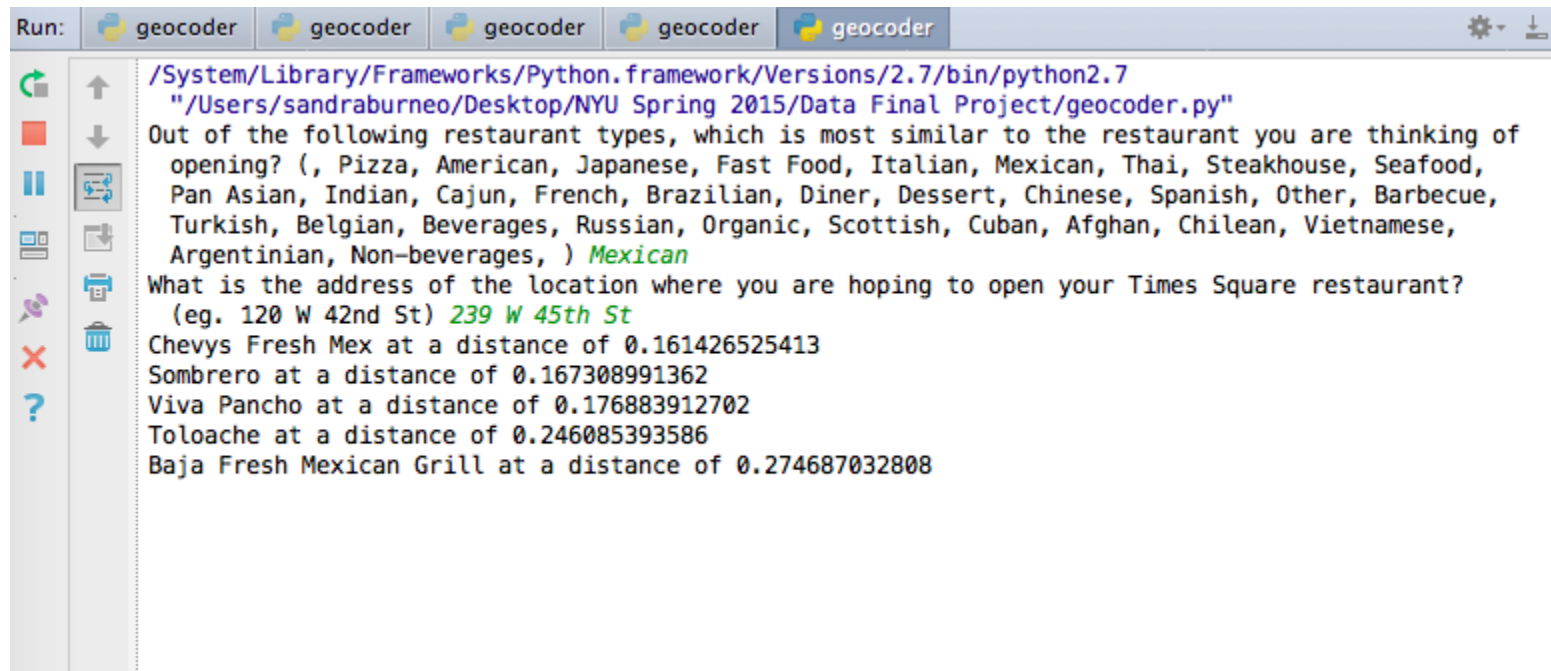
```
Run: geocoder geocoder geocoder geocoder geocoder geocoder
/System/Library/Frameworks/Python.framework/Versions/2.7/bin/python2.7
"/Users/sandrurneo/Desktop/NYU Spring 2015/Data Final Project/geocoder.py"
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Pan Asian, Indian, Cajun, French, Brazilian, Diner, Dessert, Chinese, Spanish, Other, Barbecue,
Turkish, Belgian, Beverages, Russian, Organic, Scottish, Cuban, Afghan, Chilean, Vietnamese,
Argentinian, Non-beverages, ) Steakhouse
What is the address of the location where you are hoping to open your Times Square restaurant?
(eg. 120 W 42nd St) 233 W 42nd St
Shula's Steakhouse at a distance of 0.0400913896403
Frankie & Johnnie's Steakhouse at a distance of 0.161719432939
Broadway Joe Steakhouse at a distance of 0.243503162476
Bistecca Fiorentina at a distance of 0.244752651406
Rosie O'Grady's Steakhouse at a distance of 0.252233474574

Process finished with exit code 0
```

How?



How?



The screenshot shows a Python IDE window titled "Run:" with five tabs, each labeled "geocoder". The code in the editor is as follows:

```
/System/Library/Frameworks/Python.framework/Versions/2.7/bin/python2.7  
"/Users/sandraburneo/Desktop/NYU Spring 2015/Data Final Project/geocoder.py"  
Out of the following restaurant types, which is most similar to the restaurant you are thinking of  
opening? (, Pizza, American, Japanese, Fast Food, Italian, Mexican, Thai, Steakhouse, Seafood,  
Pan Asian, Indian, Cajun, French, Brazilian, Diner, Dessert, Chinese, Spanish, Other, Barbecue,  
Turkish, Belgian, Beverages, Russian, Organic, Scottish, Cuban, Afghan, Chilean, Vietnamese,  
Argentinian, Non-beverages, ) Mexican  
What is the address of the location where you are hoping to open your Times Square restaurant?  
(eg. 120 W 42nd St) 239 W 45th St  
Chevys Fresh Mex at a distance of 0.161426525413  
Sombrero at a distance of 0.167308991362  
Viva Pancho at a distance of 0.176883912702  
Toloache at a distance of 0.246085393586  
Baja Fresh Mexican Grill at a distance of 0.274687032808
```

How?

