1. Pull multiple pieces of demographic information from the API
2. Choose variables for demographics
3. Tract data
4. Area size data for tracts/ density
5. 2013 estimates for median income in each of the census tracts
6. Demographic data based on neighborhood(aggregated some tracts in the same neighborhood)
7. Variables: 2010 Census population, 2010 Census housing unit, density-square meters, density-square miles, median income, race(White Population, Black or African American Population,American Indian and Alaska Native, Asian Population, Native Hawaiian and Other Pacific, Other Race Population,Two or more Races Population,Hispanic or Latino Population), age and sex(Population over 18, Total Male Population, Total Female Population, Median Age).
8. Neighborhood median age: mean age of each tract
9. Neighborhood median income: mean income of each tract
10. Racial, sex, age: divide each population by total population => proportions
11. Add up "American.Indian.and.Alaska.Native, Native.Hawaiian.and.Other.Pacific , Other.Race.Population, Two.or.more.Races.Population” and name it "other.race"
12. Final variables we have got: "neighborhood", "population", "area", "density", "age", "income", "white", "black.african", "asian", "hispanic.latino", "other.race", "age.over.18", "male", "female"
13. Input metric variables from 311 data with our demographic data
14. Do simple regressions and multiple regressions on the relationship between departments and demographic data
15. Chi-square test