QGIS Documentation

Steps for Map 1

1. Load data in QGIS
    a. Litter bins
    b. Community districts
    c. CSV of CD populations that I made in Excel, sourced from NYC planning website
2. Count Litter Bins per Community District
    1. Add Community District IDs to Bins:
        - Use Join Attributes by Location
    2. Count Bins in Each Community District:
        - Use Count Points in Polygon
3. Join population data to community districts layer
    a. Calculate trash bins per 100k people to normalize data
        - Use field calculator
4. Symbolize and a choropleth
5. Export and annotate in Inkscape

Steps for Map 2

1. Load filtered data set of only high-end baskets, prepared in R
2. Same steps 1-4 as Map 1

QGIS steps for preparing income and bins data for use R

1. Load median income data per community district, which I accessed from NYC planning website and prepared in excel
2. Tabular join to the community districts layer that has the count of bins per CD normalized
3. Export as a csv and edit in excel

QGIS steps for preparing rat inspection data for use in R

1. Load rat inspection data from NYC Open Data
2. Join Inspections to community districts
    a. Use the coordinate fields (latitude/longitude) to create a point layer
    b. Use Join Attributes by Location (Summary) to calculate the amount of inspections performed in each CD
3. Create a different layer to calculate the number of failed inspections in each community district
    a. Filter the rat inspection points layer by result type “Rat Activity”
4. Count how many Rat Activity results there are in each CD
    a. Join Attributes by Location (Summary
5. Repeat these steps for result type “Failed for Other Reasons”
6. Export the three different layers to their own CSVs
7. Combine the three(overall number of inspections, number of ‘Rat Activity’ results, and number of “Failed for Other Reasons” results) in excel and clean up the column names
8. Load into R