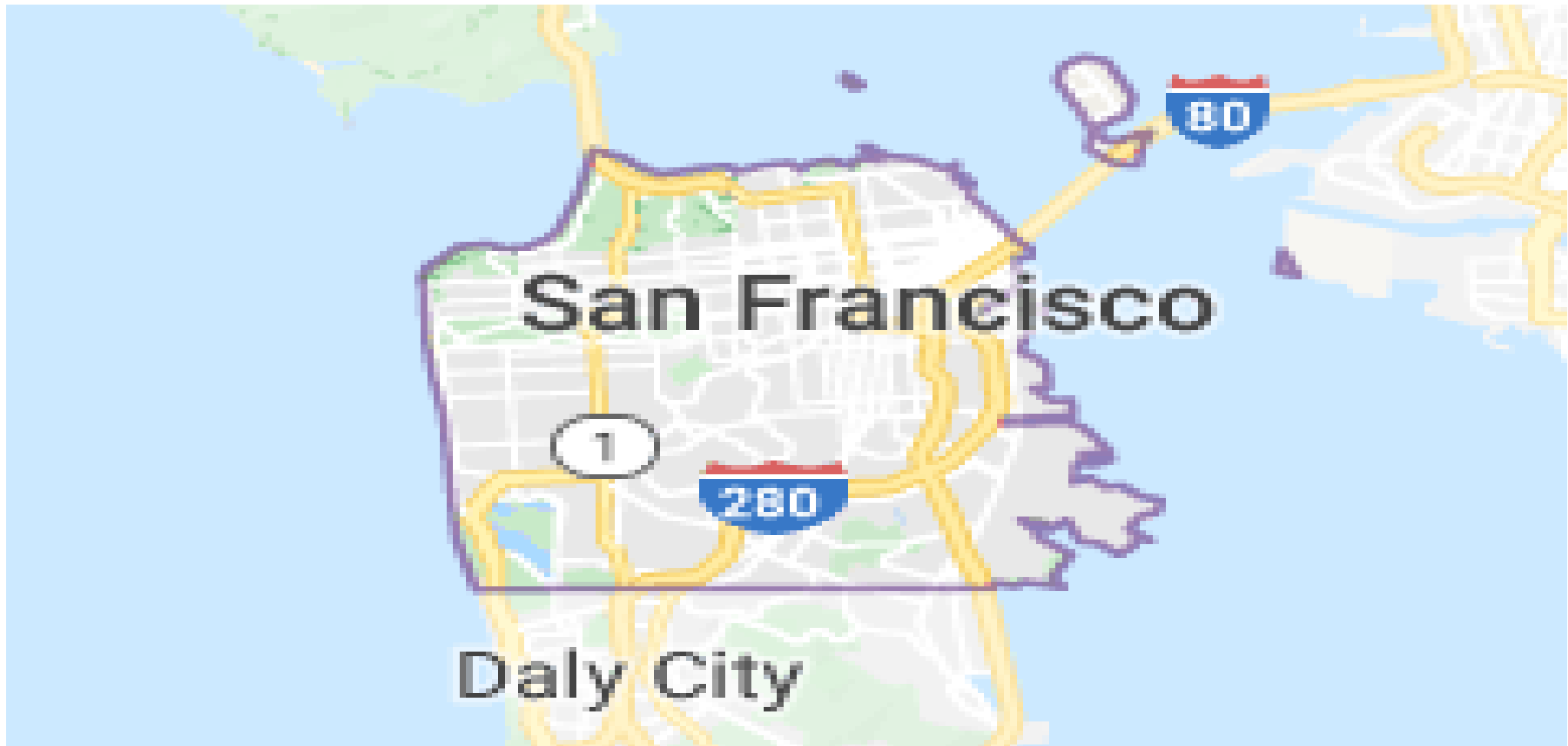


*Coursera capstone*  
*IBM data science*

Where to open a restaurant in  
San Francisco depending on  
income of household

In city of san francisco



# Introduction:

- Location can also influence a business's ability to market itself, the competition it faces from businesses, the total cost of operation, taxes the business owner has to pay and the regulations they must follow.
- Location also matters for marketing. The importance of location goes beyond your business' physical location and your website rank in Google search results. It extends to the placement of your advertisements.

# Business problem

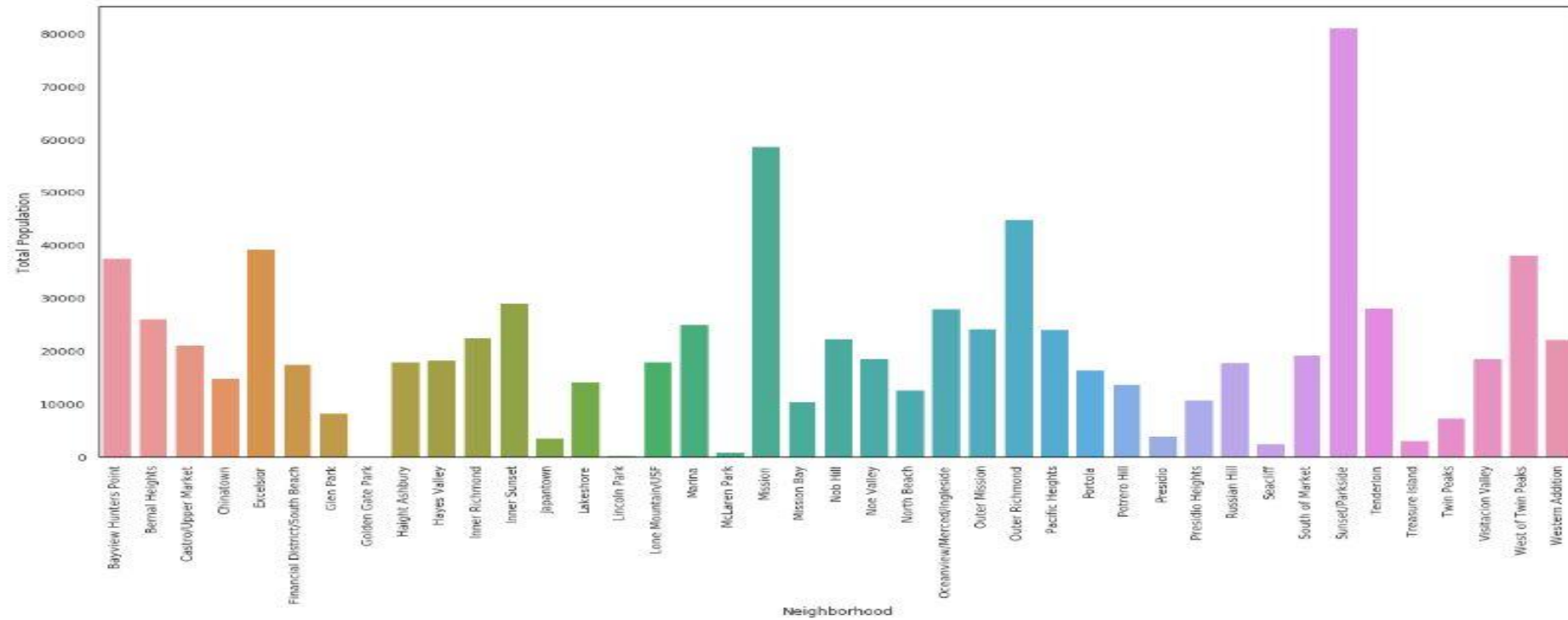
- When deciding where to open a new location, there are a few business location advantages and disadvantages to consider. As previously noted, identifying a well-trafficked area can be critical to getting a business off the ground.
- Consistent traffic is the key to driving daily revenues and can help generate the money necessary to pay back debts, such as business loans.

# Audience

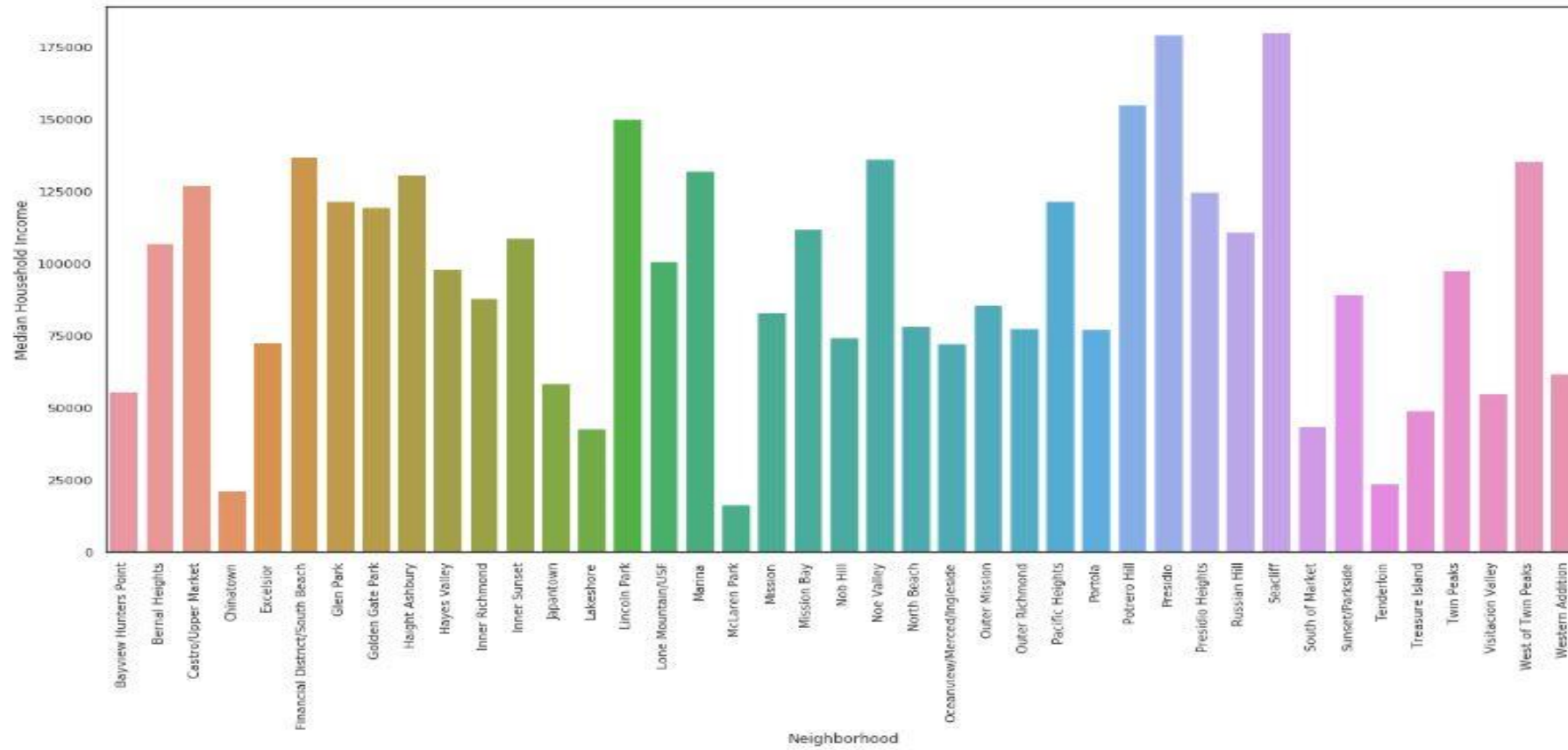
- Location data can reveal a trove of information about a customer's daily travel routines (such as commutes), recurring shopping habits (like grocery shopping or gas station stops), restaurant preferences, and even online-to-storefront purchasing behavior. The data allows for more personalized targeting for the products and services customers might care about and enables more efficient ad targeting and budget allocation for marketers.

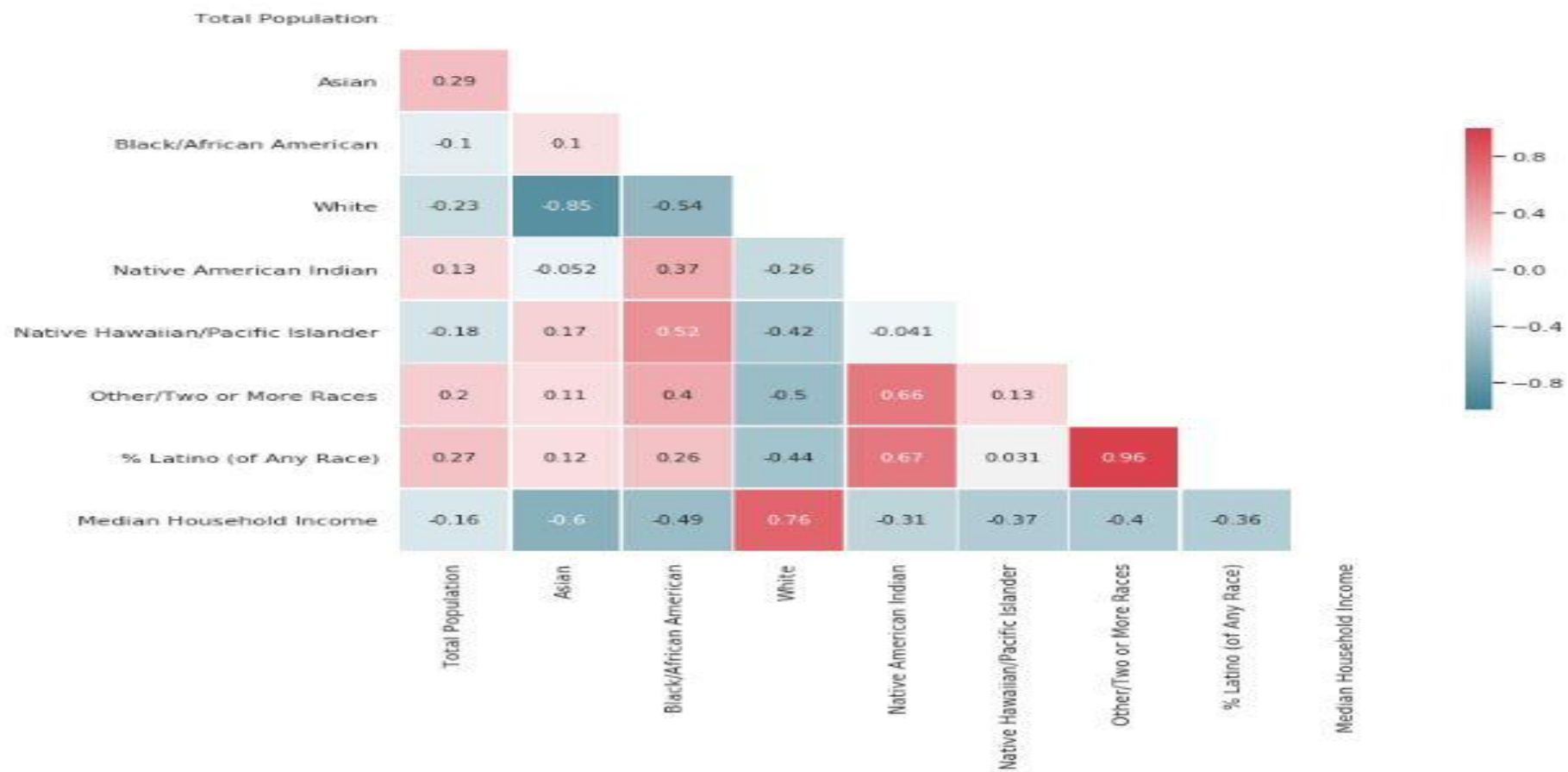
# Results

- box plot to see the distribution of population and whether there's any outliers.



box plot to see the distribution of median household income and whether there's any outliers







# conclusion

- We can see that higher percentage of White household corresponds with higher median household income, while the high percentage of any other race household corresponds negatively with median household income.