



# CAPSTONE PRESENTATION - TOKYO

# INTRODUCTION

## Problem:

Where should I stay in Tokyo for a vacation?

## Constituency:

- Tourists
- Japanese tourism bureaus
- Travel services

## Questions:

- What is the layout of Tokyo and its neighborhoods?
- What places might be interesting to visit
- What areas have hotels and trains?

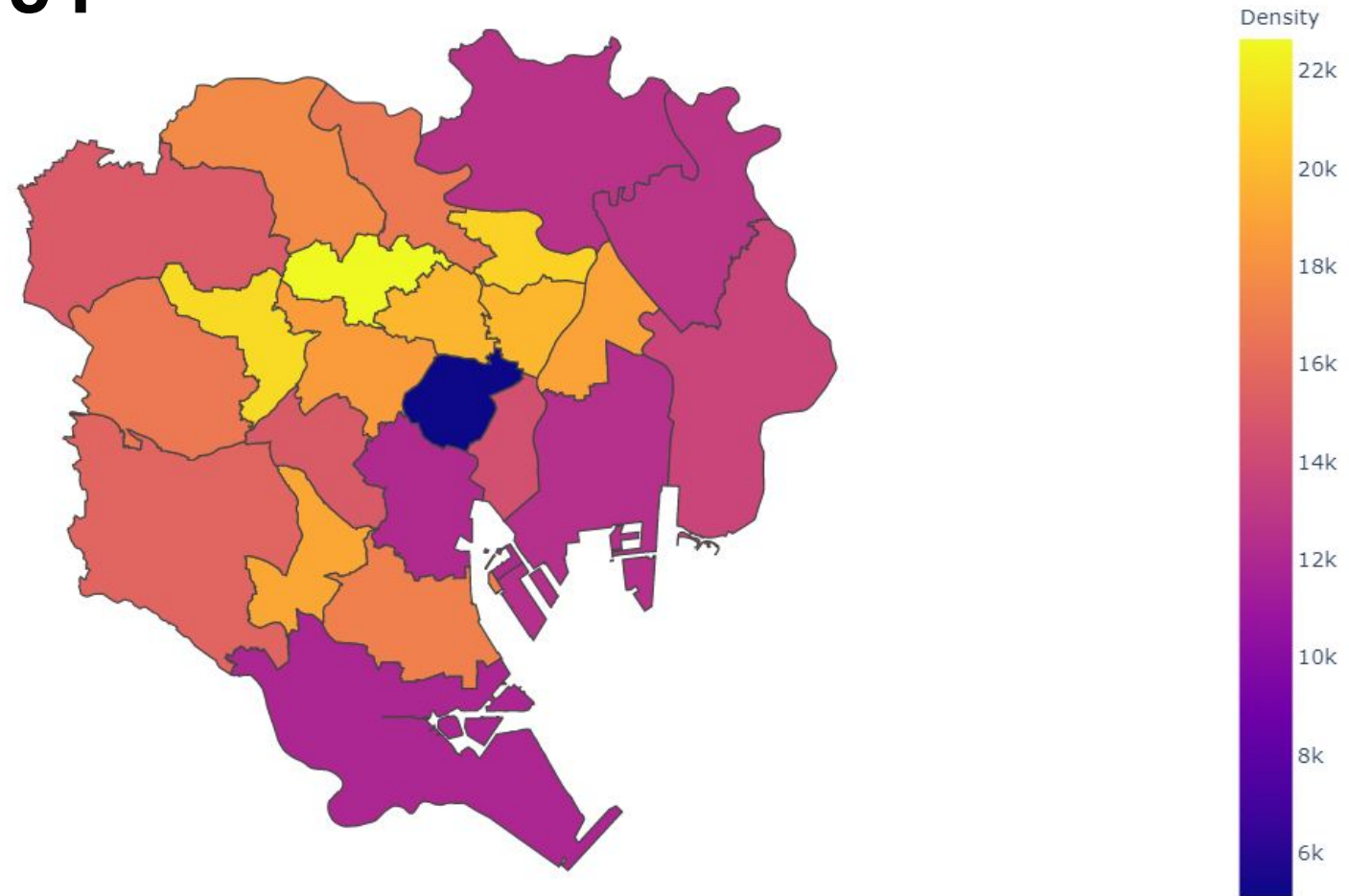
# DATA

- The populations and population densities of Tokyo's wards
- The major districts associated with each ward
- The latitude and longitude of each district
- Geojson file of Tokyo from Github
- Foursquare venue data

Ward	Population	Density
Chiyoda	59441	5100
Chuo	147620	14460
Minato	248071	12180
Shinjuku	339211	18620

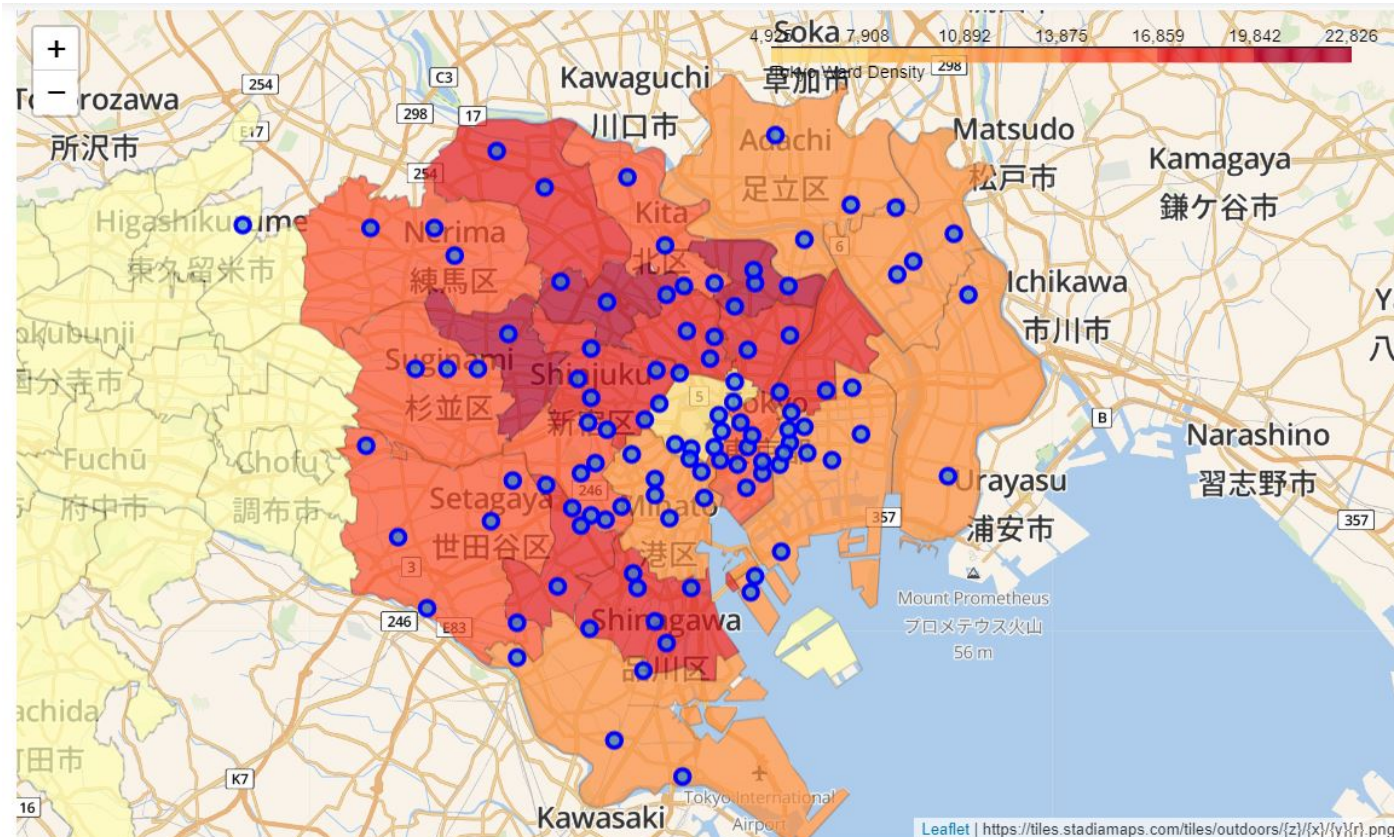
District	Ward	Longitude	Latitude
Akabane	Kita	139.7208	35.77814
Akihabara	Chiyoda	139.7713	35.69974
Aobadai	Meguro	139.6943	35.6509
Aomi	Koto	139.7812	35.62478

# METHODOLOGY



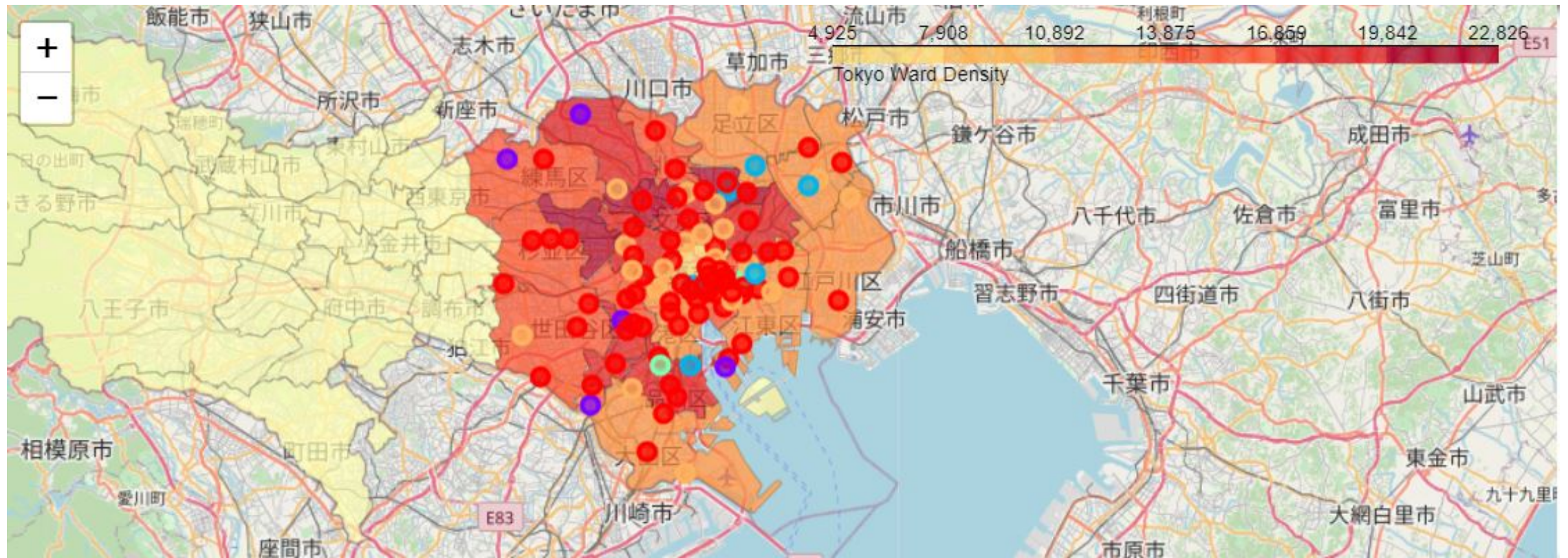
Wards colored by population density

# DISTRICTS LOCATIONS IN THE WARDS





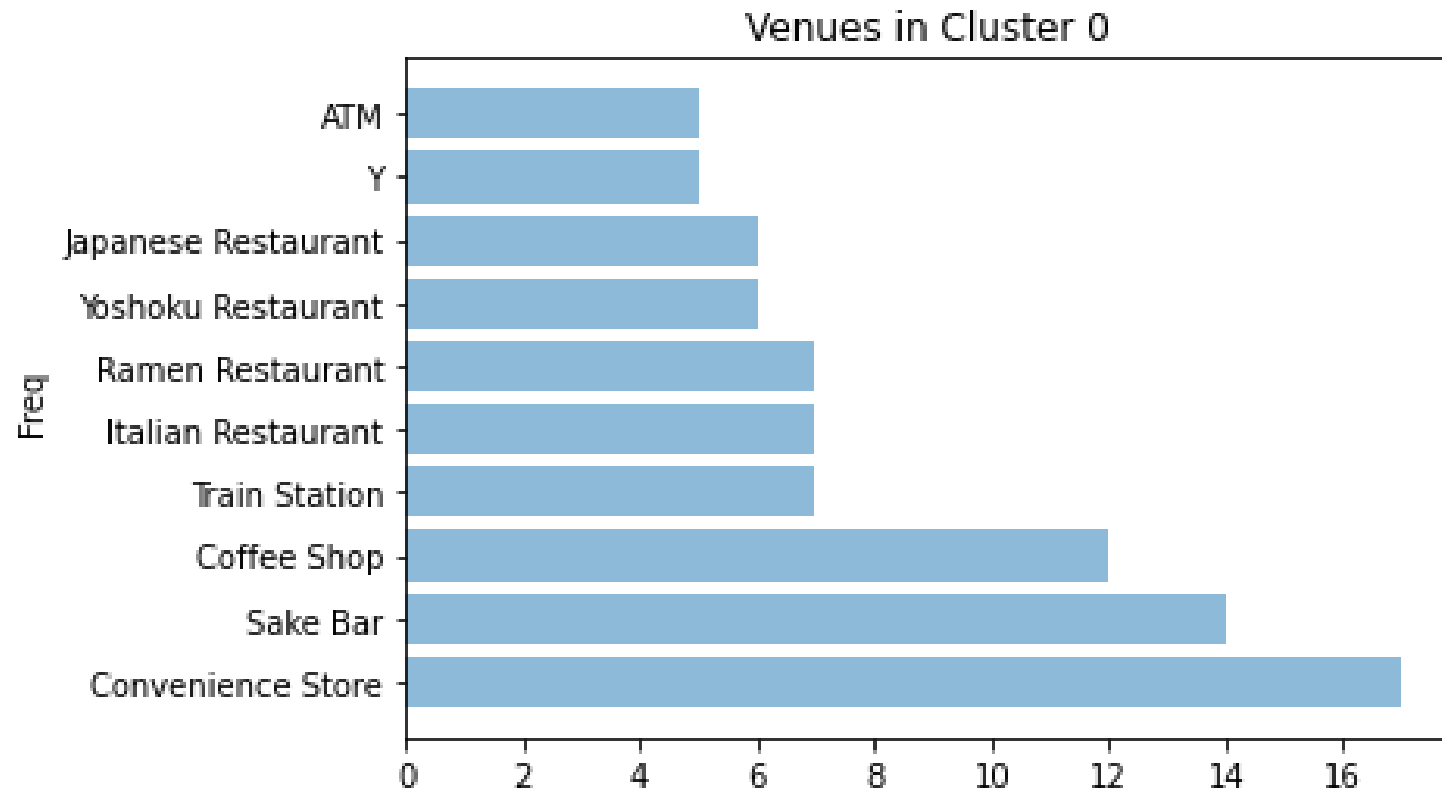
# KMEANS 5 CLUSTERS



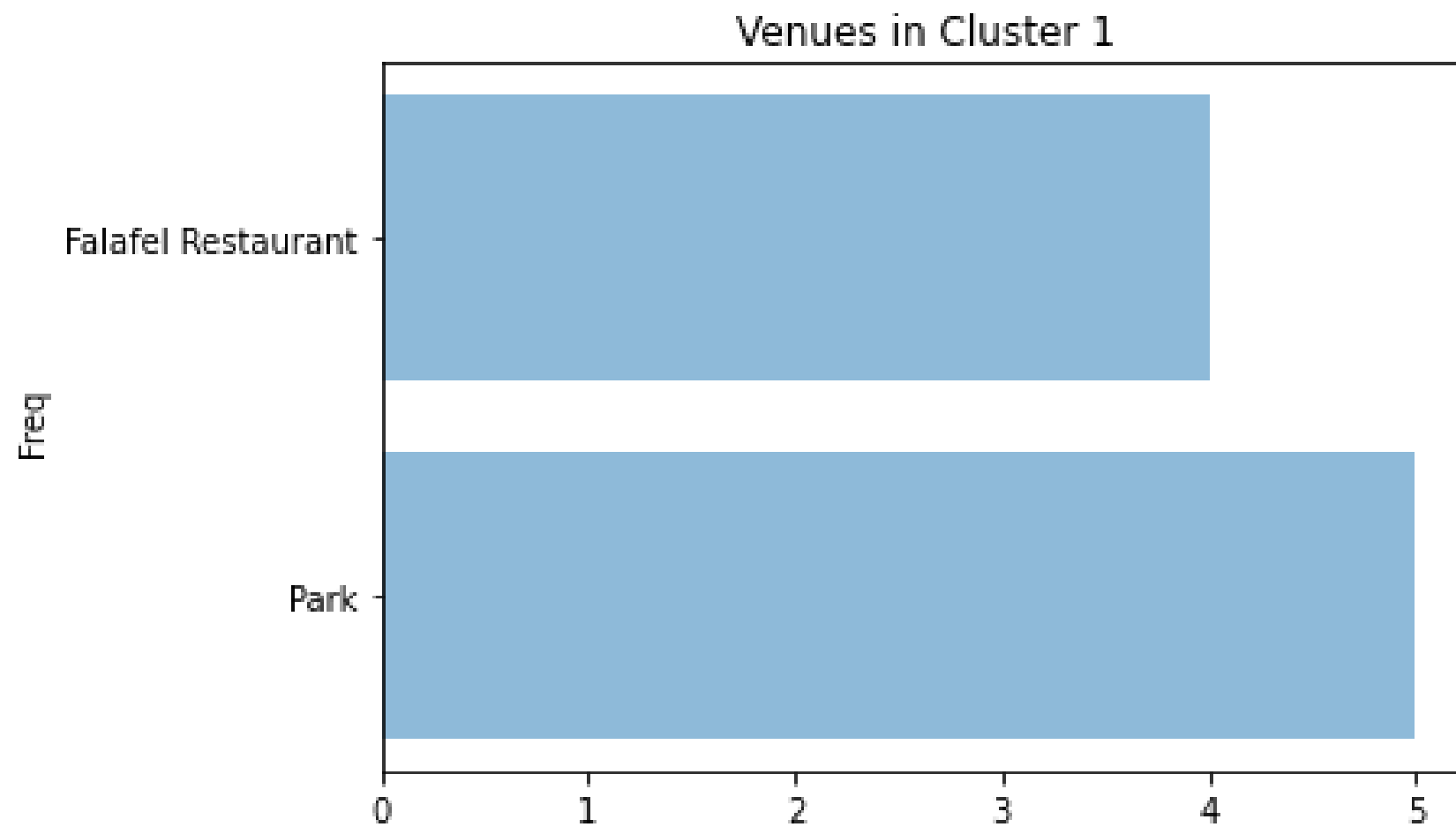


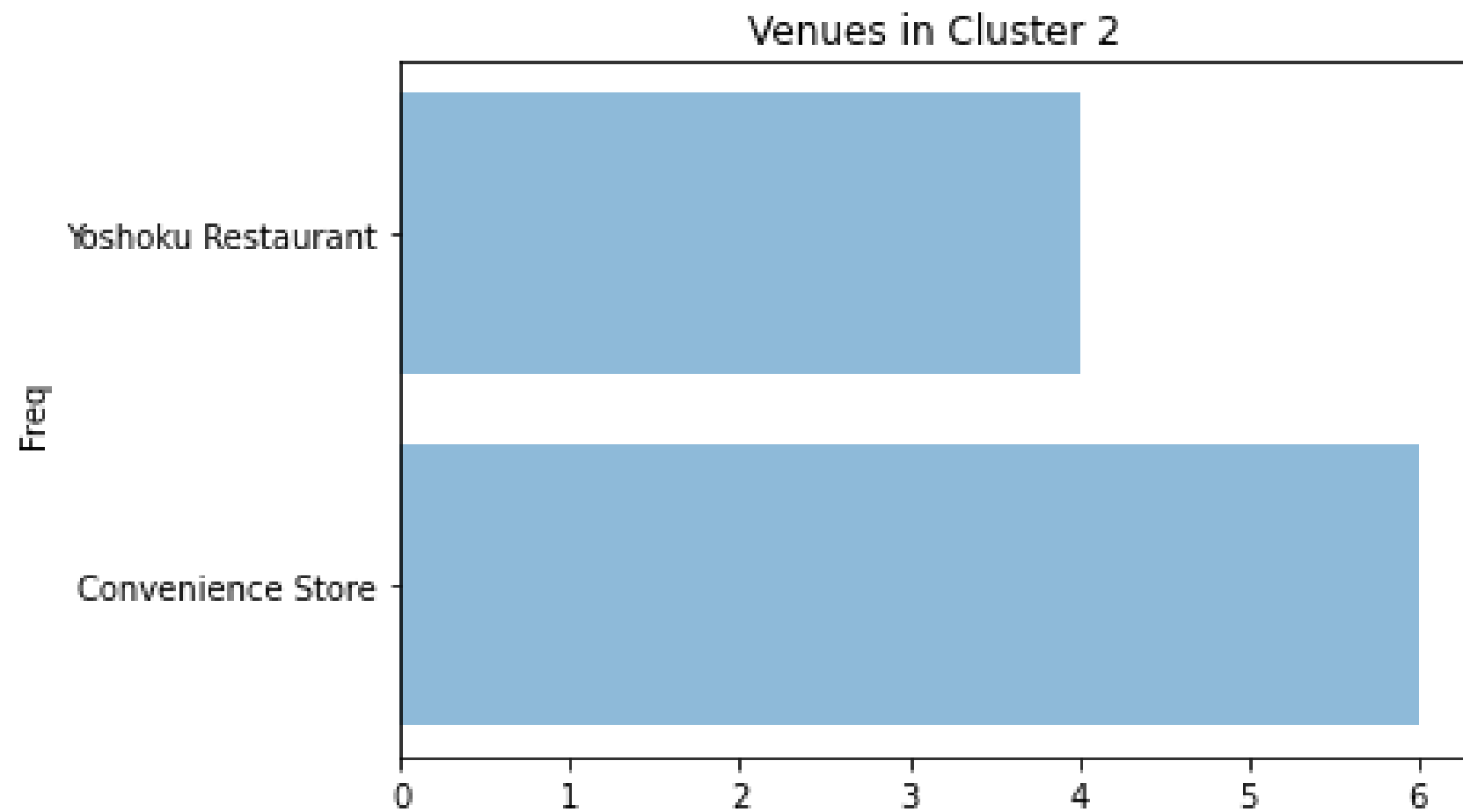


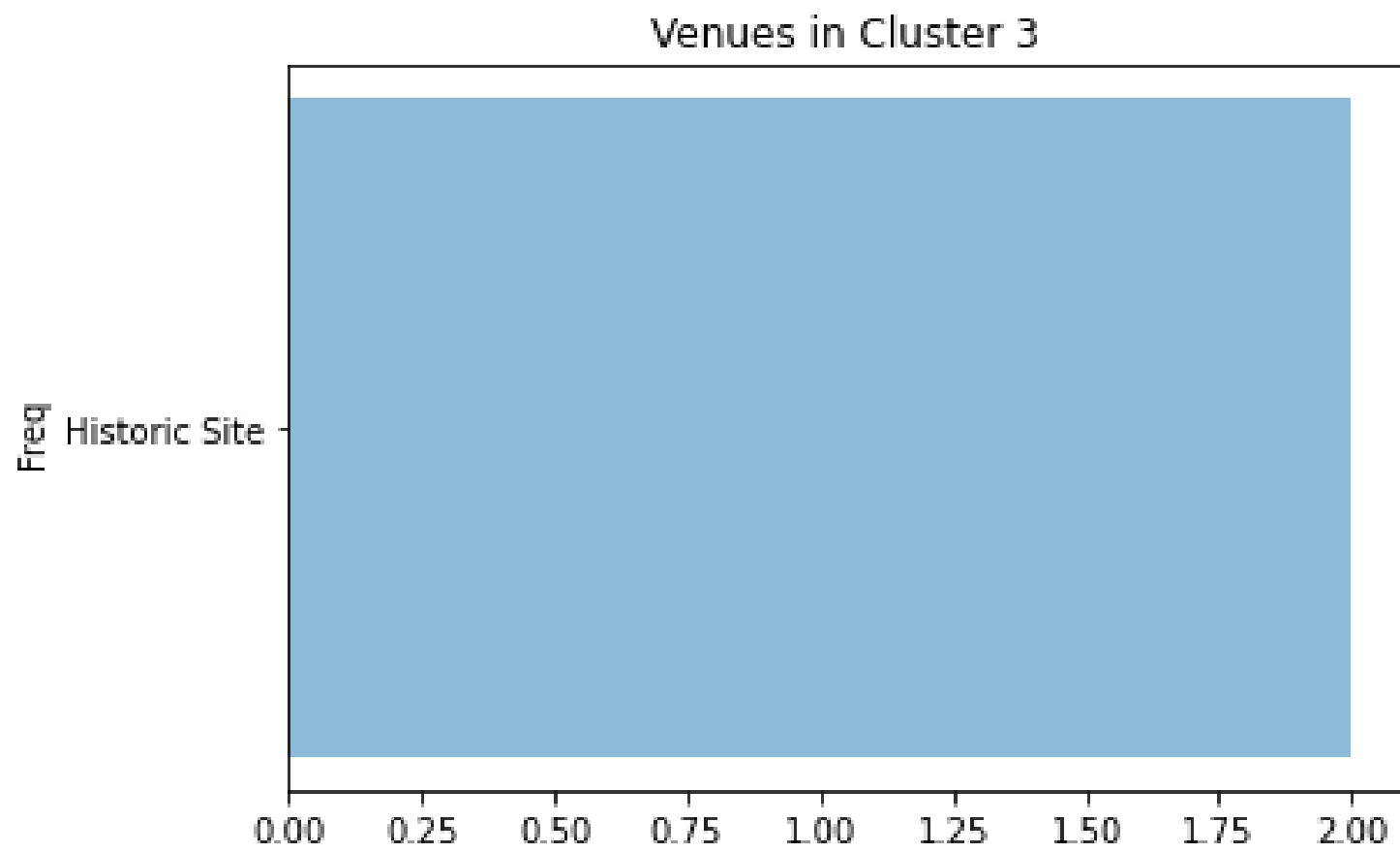
# TWO MOST COMMON VENUES FOR EACH DISTRICT IN EACH CLUSTER











# RESULTS

- Using cluster 0 as an example, hotels and transport can be discovered
- Hotels are in Ariake, Omori, Shinbashi, Atemachi, Marunouchi, Hatchobori, Aoto, Asagaya, Koenji, and Ogikubo
- Train stations are in Etchujima, Hatadodai, Oji, Shinagawa, Machiya, Shibamata, Tabata, and Ariake
- The only district in common is Ariake



# LOCATION OF ARIAKE



# DISCUSSION

- The clustering did not pick up places that were less frequent, but possibly more interesting
- For accommodations, I could also look at Airbnb and hostels
- For transport, given the distance I could also just walk or bike

# CONCLUSIONS

- I learned the layout of Toyko, Japan
- After clustering the districts, I found the most common venues and of the districts, the best to stay at is Ariake
- Further work could be done to find other suitable places to stay