

Segmentation of Hyderabad Localities

Introduction

- Hyderabad is the capital city of Telangana occupying 650 square kilometers (250 sq mi).
- It consists of over 1000 neighborhoods with over 9.7 million population making in Fourth most populous city in India.

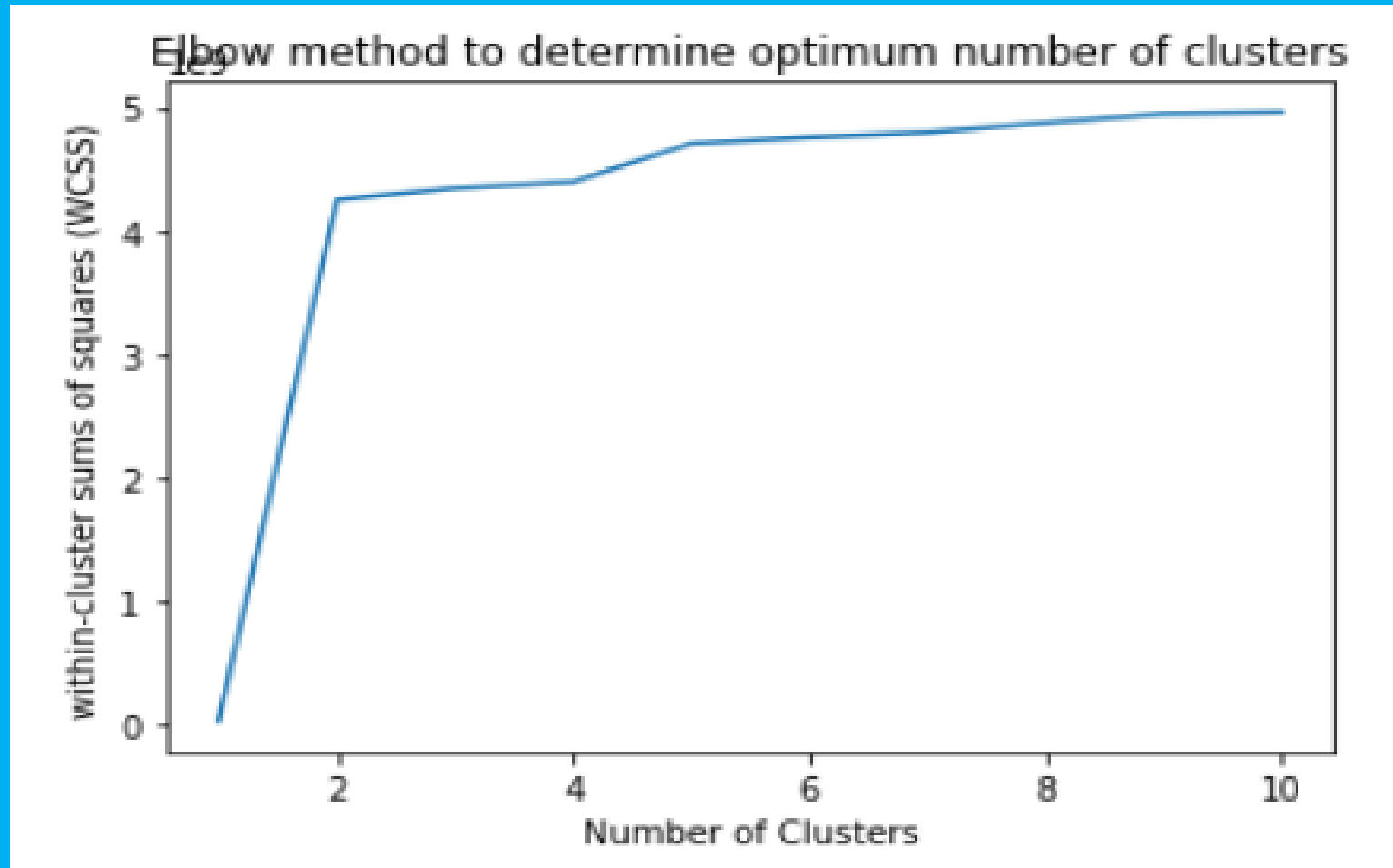
Problem Statement

- Under an example of a person looking to buy a new house, he often wonders which area he has to choose.
- To solve this problem, we use K means algorithm to determine best areas to buy new house.

Data acquisition and cleaning

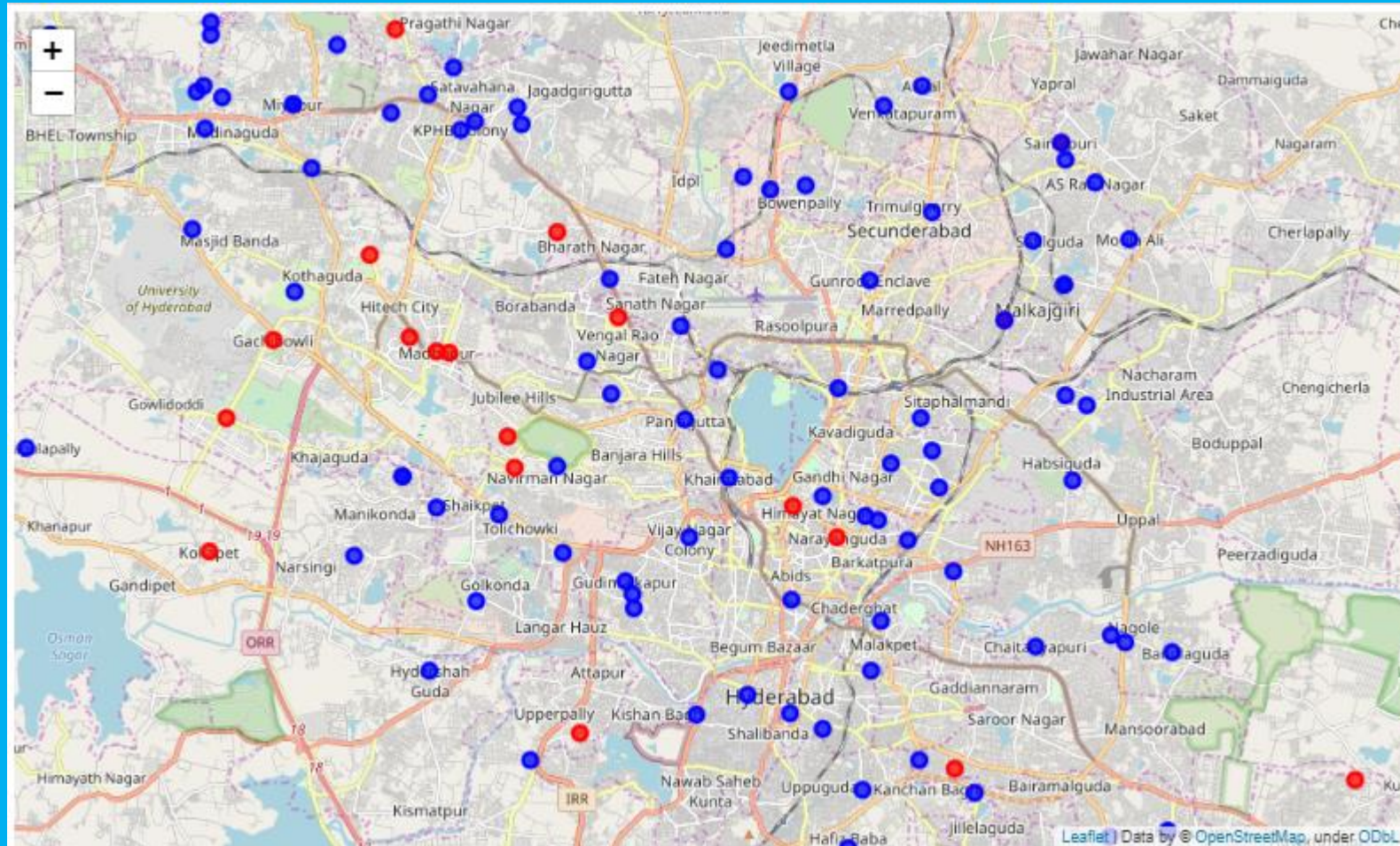
- Neighborhood names, plot pricing from manamm.com
- Location Coordinates using geocoder
- Near by places using Four Square API
- Entire dataset has been processed to reduce redundancy.

Elbow method



- As the change is maximum at $k=2$, we choose no of clusters as two.

Result using Folium



- Best areas to buy/rest houses is marked as red.
- Not good areas are marked as blue.

Future Reference and Conclusion

- Data of land survey such as drought/flood prone areas, soil minerals can help to have more insight about neighborhoods.