Exploring Restaurants in Agra City

Now, our presentation begins

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INTRODUCTION

- Agra is a city on the banks of the Yamuna river in the Agra district of the Indian state of Uttar Pradesh.
- Agra is a major tourist destination because of its many Mughal-era buildings, most notably the Taj Mahal, Agra Fort and Fatehpur Sikri
- Agra is the fourth-most populous city in Uttar Pradesh and 24th in India.
- We are going to explore the zomato.csv file to find the best restaurants in a locality in a Agra.
- Also we will find the highly recommended restaurants in a particular area.

DATA

- For this project we have downloaded data from kaggle which is a zomato.csv file.
- To get the information about the restaurants present in Agra firstly we will find the restaurants present in India then we will search for all the restaurants present in Agra.
- The data contains different information about each city like its locality, restaurant name, rating of restaurants, their latitude and longitude etc.
- Here we will be using Foursquare API to get the information about the venue of all the restaurants in Agra.

OBJECTIVE

The main objective of exploring the data is to find the answer of the questions hidden behind the data.

To extract that data we firstly need to preprocess the whole data and then we have to visualize that data to find the insight of the data.

Following the question that are need to be answered ;

a. Where are top 7 highly rated restaurants are located in Agra?
b. Which are the worst 5 rated restaurants in Agra?
c. Find the locality where the highest number of restaurants are available?
d. Find the locality where the lowest number of restaurants are available?
e. Find the restaurants where best North Indian food is served?

METHODOLOGY

Approach:

- Firstly, we will collect the data from kaggle and then we will try to find the answer of the question that is lying inside the data.
- Before finding the insights we need to preprocess the data which is the most important step of cleaning the data.
- In this we will find the unnecessary column that we don't need further and will eliminate that one.

Visualization :

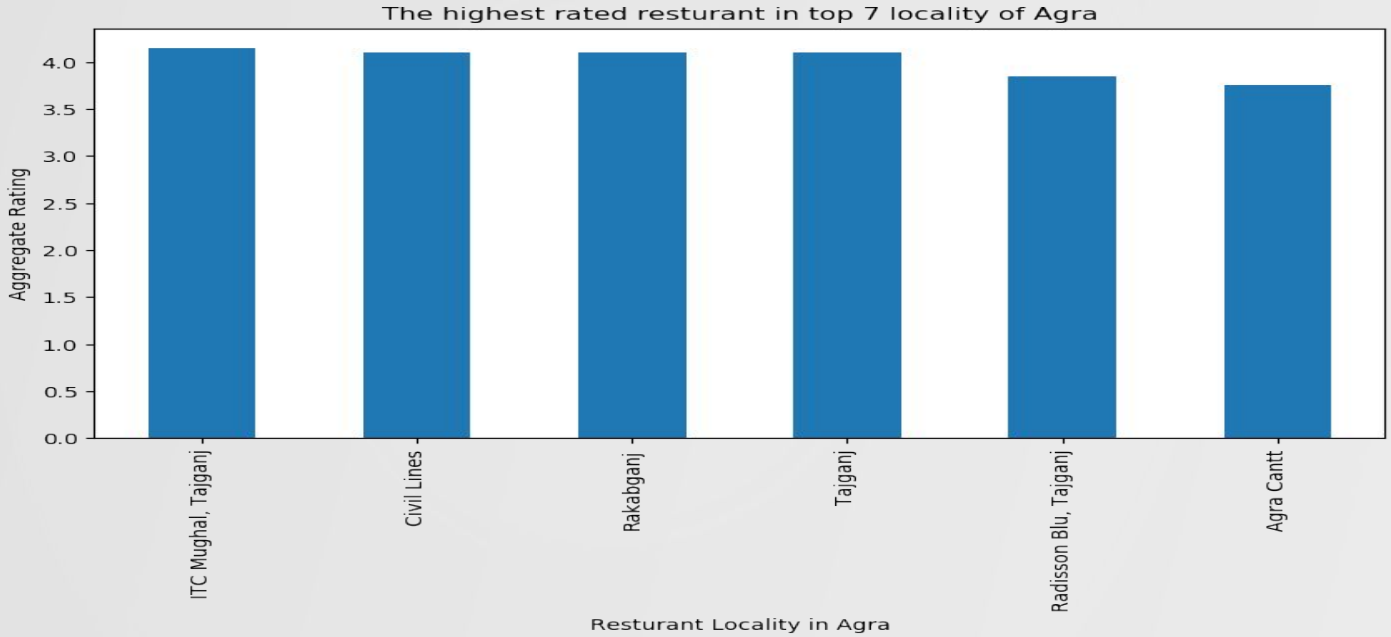
- In this after cleaning the data we will try to visualize the data which will make our work more easy and efficient.
- Visualization generally means that we are trying to see the data graphically.

After perform all the above step we will answer the questions.

RESULTS

Now we will answer all the question asked :

A. Where are top 7 highly rated restaurants are located in Agra?



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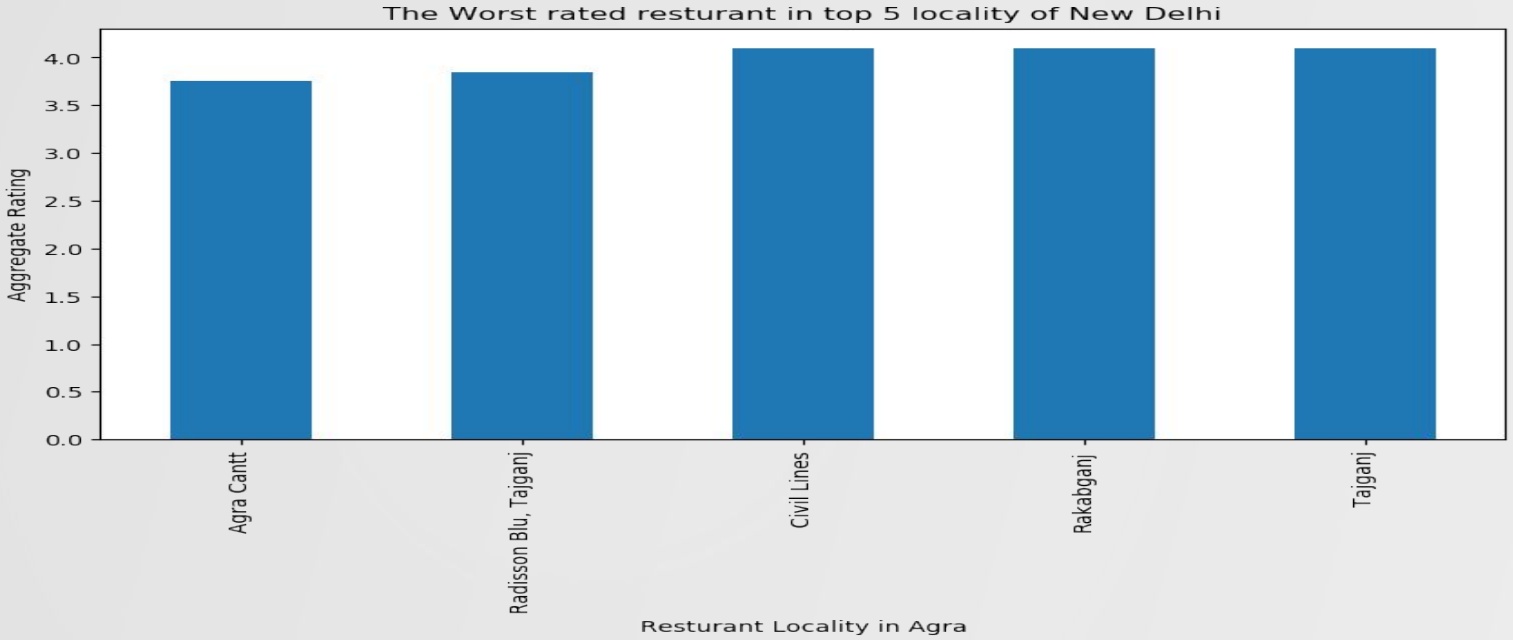
B. Where are the worst 5 rated restaurants located in Agra?



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C. Find the locality where the highest number of restaurants are available?

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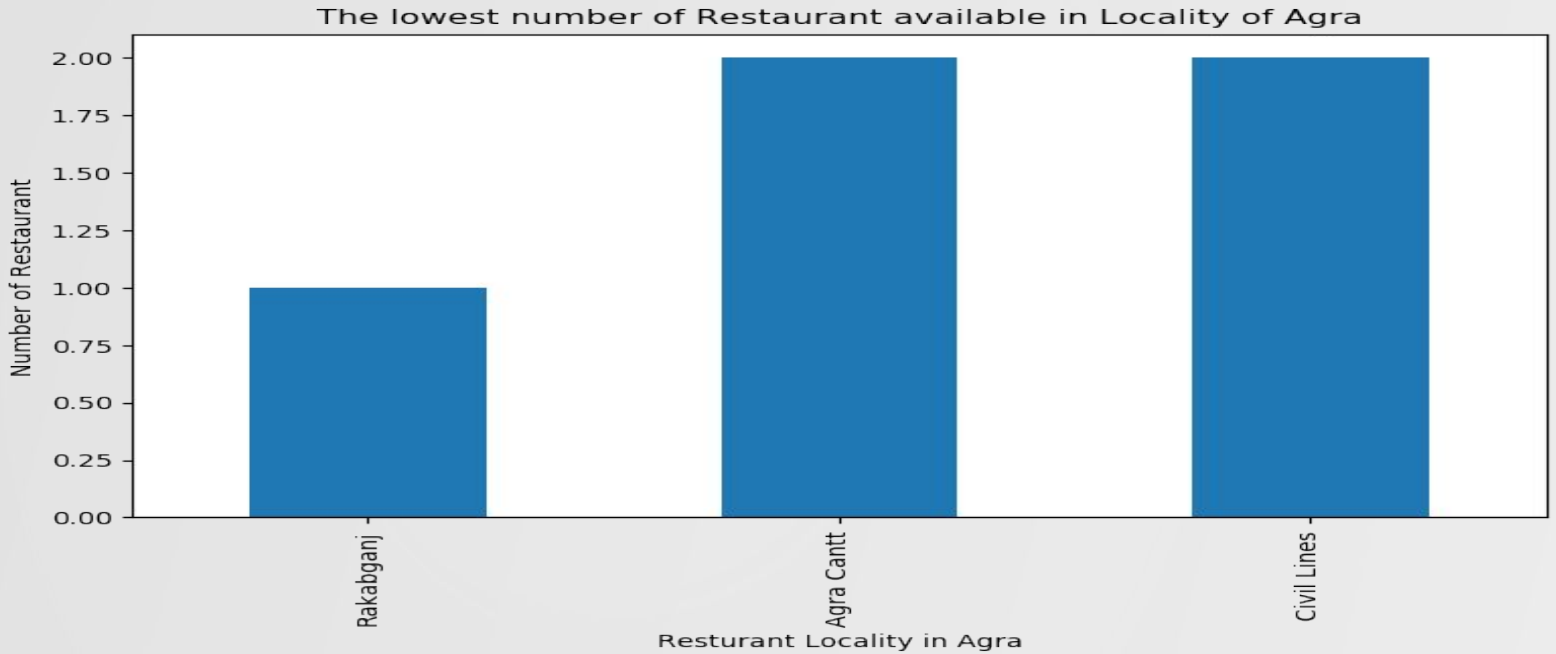
D. Find the locality where the lowest number of restaurants are available?



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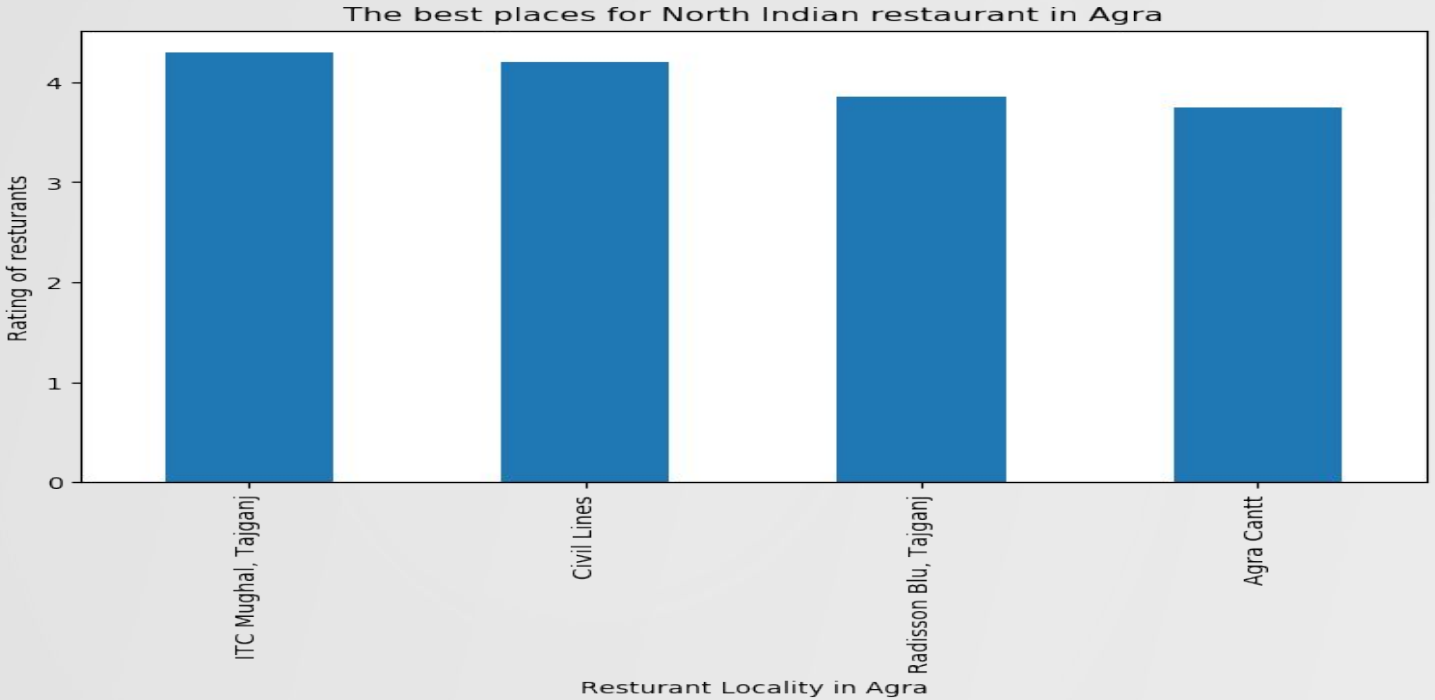
E. Find the restaurants where best North Indian food is served?



Conclusion

- In this study we saw relationships between the different entities that are present inside the data.
- Here we are using the K-means clustering algorithm to find the cluster of restaurants that are located in a locality.
- K-means clustering is one of the simplest and popular unsupervised machine learning algorithms.
- Using the k-means we found the different cluster which helps to answer the insights that are present inside the data.
- Here, we managed to find out the best/worst restaurants, highest/lowest number of restaurants in a locality , best North Indian food restaurant in Agra etc.

Thankyou

For Your Attention