TASK SHEET - ZOMATO

1. Can we identify any anomalies or inconsistencies in the data, such as restaurants with unusually high ratings but low vote counts?
2. Are there any significant correlations between the presence of specific cuisines and the availability of online delivery or table booking?
3. How does the average cost for two vary for restaurants located in tourist-heavy areas versus residential areas?
4. Can we detect any patterns in the opening and closing times of restaurants, such as clustering around specific hours or days of the week?
5. Is there a relationship between the distance of a restaurant from the city center and its average cost for two?
6. How does the popularity of different cuisines change over time? Can we identify any emerging trends?
7. Are there any discernible patterns in the distribution of restaurant ratings based on their proximity to landmarks or tourist attractions?
8. Can we predict the likelihood of a restaurant having online delivery based on its geographical location and average cost for two?
9. How do restaurants with Michelin stars or other prestigious awards compare in terms of their average cost for two and aggregate ratings?
10. Are there any cultural or demographic factors that correlate with the presence of restaurants offering specific cuisines?
11. Can we identify any clusters of restaurants based on their features such as price range, availability of online delivery, and aggregate rating?
12. How do restaurants with similar characteristics (e.g., cuisine, price range) cluster together geographically?
13. Is there a relationship between the size of a restaurant (measured by the number of seats) and its average cost for two?
14. How do restaurants located in urban areas compare to those in suburban or rural areas in terms of their average cost for two and aggregate ratings?
15. Can we predict the likelihood of a restaurant having online delivery based on its demographic characteristics, such as income level or population density in the surrounding area?

For data visualization:

1. Create a dendrogram to visualize hierarchical clustering of restaurants based on their features.
2. Use a network graph to explore relationships between restaurants based on shared features or characteristics.
3. Plot a heatmap to visualize the correlation matrix between different numerical variables.
4. Create a Sankey diagram to illustrate the flow of customers between different cities or regions.
5. Use a radial plot to visualize the distribution of restaurants around a central point, such as a city center.
6. Plot a radar chart to compare the features of restaurants in different clusters.
7. Create a 3D scatter plot to visualize the relationship between three numerical variables simultaneously.
8. Use a violin plot to compare the distribution of aggregate ratings between restaurants with and without online delivery or table booking.
9. Plot a dendrogram to visualize hierarchical clustering of cuisines based on their similarity in terms of restaurant features.
10. Use a treemap to visualize the proportion of restaurants offering different cuisines within each city.