Data Visualization
Assignment

1. Can you create a time series line chart showing the trend of transactions over time?
2. How does the distribution of online orders compare to offline orders? Bar chart or pie chart?
3. Which product lines are most prevalent? Can you represent this using a bar chart?
4. Visualize the popularity of different brands using a bar chart or pie chart.
5. Create a histogram showing the distribution of product prices.
6. How does the gender distribution look among customers? Pie chart?
7. Can you calculate customer ages from DOB and show their distribution using a histogram?
8. Represent the wealth segments of customers using a pie chart or bar chart.
9. Visualize the proportion of customers who own cars versus those who don't. Pie chart?
10. Which industries are most represented among customers? Bar chart?
11. How many transactions does each customer make on average? Bar chart?
12. Histogram for property valuation.
13. Pie chart or bar chart showing the number of customers in each state.
14. Visualize the distribution of product classes.
15. How do past bike-related purchases vary among different customer segments? Bar chart?
16. Pie chart for the distribution of transaction statuses.
17. Histogram for customer tenure.
18. Bar chart showing the top customers by the number of transactions.
19. Visualize the most common job titles among customers.
20. Pie chart or bar chart showing the number of customers in each country.
21. Box plot showing property valuation distribution by state.
22. Box plot showing transaction amounts for different brands.
23. Bar chart showing the count of customers by gender.
24. Scatter plot showing the relationship between job titles and job industries.
25. Pie chart or bar chart showing the count of customer addresses in each country.
26. Considering the NewCustomerList and Transaction sheets, how effective was the recent marketing campaign in terms of converting new customers into making transactions? Create a trend line or bar chart showcasing the number of new customers against the number of transactions over time.
27. In the CustomerDemographic and CustomerAddress sheets, visualize the relationship between customer demographics (age groups) and car ownership. How does car ownership vary across different age brackets? Can you represent this using a stacked bar chart or grouped bar chart?
28. Using data from the Transactions and CustomerAddress sheets, create a geographical map or bar chart that displays the total sales of different product lines in each state. How do sales of specific product lines vary across different states?
29. Utilizing data from CustomerDemographic and CustomerAddress, analyze the relationship between customer tenure and property valuation. Would a scatter plot be an

effective way to visualize this relationship? How do customers with longer tenure relate to property valuation?

30. Considering the Transactions and CustomerDemographic sheets, visualize the differences in purchasing behavior (such as average transaction amount or frequency) between male and female customers. Would a comparative histogram or box plot be suitable for this analysis?