POSSIBLE TASKS FOR OUR USERS.

Tasks for Master's Students in Finance, Economics, Business Analytics, or Data Science:

**1. Credit Score Trends Over Time:**

• Question: How do credit scores change over consecutive months for individual customers, and what patterns or trends can be identified?

• The dataset includes information on credit scores over different months for individual customers, making it suitable for visualizing credit score trends over time.

• Visualization Type: Line Chart

• Explanation: A line chart can depict the trend in credit scores over consecutive months for individual customers, providing a clear visual representation of changes over time.

**2. Impact of Interest Rates on Credit Scores:**

• Question: Visualize the relationship between interest rates and credit scores to understand how changes in interest rates correlate with creditworthiness.

• The dataset includes an "Interest\_Rate" column, allowing for an analysis of how interest rates correlate with credit scores.

• Visualization Type: Scatter Plot or Line Chart

• Explanation: A scatter plot or line chart can illustrate the relationship between interest rates and credit scores, showing how changes in interest rates correlate with creditworthiness.

**3. Loan Type and Creditworthiness:**

• Question: Explore the distribution of credit scores based on different types of loans (Auto Loan, Credit-Builder Loan, Personal Loan, etc.) to identify trends in creditworthiness associated with specific loan types.

• The "Type\_of\_Loan" column contains information on different types of loans, enabling exploration of creditworthiness associated with specific loan types.

• Visualization Type: Bar Chart or Box Plot

• Explanation: A bar chart or box plot can display the distribution of credit scores based on different types of loans, helping to identify trends in creditworthiness associated with specific loan types.

**4. Effect of Delayed Payments on Credit Scores:**

• Question: Visualize the impact of delayed payments on credit scores over time, considering the delay from the due date and the number of delayed payments.

• The "Delay\_from\_due\_date" and "Num\_of\_Delayed\_Payment" columns provide information on delays, allowing for an analysis of their impact on credit scores.

• Visualization Type: Line Chart or Heatmap

• Explanation: A line chart can show the trend in credit scores over time, highlighting periods of delayed payments. Alternatively, a heatmap can visualize the intensity of delays over multiple months.

**5. Credit Utilization Ratio Analysis:**

• Question: Investigate how credit utilization ratios relate to credit scores, exploring whether customers with lower credit utilization ratios tend to have higher credit scores.

• The "Credit\_Utilization\_Ratio" column can be used to explore the relationship between credit utilization ratios and credit scores.

• Visualization Type: Scatter Plot or Bubble Chart

• Explanation: A scatter plot or bubble chart can illustrate the relationship between credit utilization ratios and credit scores, allowing for the identification of patterns.

**6. Income and Creditworthiness:**

• Question: Analyze the distribution of credit scores based on annual income to understand how income levels may influence creditworthiness.

• The "Annual\_Income" column allows for the analysis of credit scores based on annual income.

• Visualization Type: Box Plot or Violin Plot

• Explanation: Box plots or violin plots can showcase the distribution of credit scores based on annual income, providing insights into how income levels influence creditworthiness.

**8. Occupation and Credit Scores:**

• Question: Visualize credit scores based on different occupations to identify any patterns or disparities in creditworthiness across professions.

• The "Occupation" column provides information on customer occupations, enabling exploration of credit scores across different professions.

• Visualization Type: Grouped Bar Chart or Treemap

• Explanation: Grouped bar charts or treemaps can effectively display credit scores across different occupations, facilitating comparisons.

**9. Monthly Spending Behavior and Credit Scores:**

• Question: Explore the relationship between monthly spending behavior (high-spent, low-spent, medium value payments) and credit scores to assess how spending habits impact creditworthiness.

• The "Payment\_Behaviour" column categorizes spending behavior, allowing for an analysis of its impact on credit scores.

• Visualization Type: Stacked Bar Chart or Radar Chart

• Explanation: Stacked bar charts or radar charts can represent the relationship between monthly spending behavior categories and credit scores, highlighting patterns.

**10. Credit Score Changes with Altered Credit Limits:**

• Question: Investigate how changes in credit limits affect credit scores, focusing on customers with altered credit limits and their corresponding credit scores.

• The "Changed\_Credit\_Limit" column can be used to investigate how changes in credit limits affect credit scores.

• Visualization Type: Line Chart or Area Chart

• Explanation: Line charts or area charts can visualize the impact of changes in credit limits on credit scores over time.

**11. Monthly EMI and Credit Scores:**

• Question: Visualize the relationship between the total monthly EMI payments and credit scores to identify any trends or correlations.

• The "Total\_EMI\_per\_month" column provides information on monthly EMI payments, enabling analysis of their relationship with credit scores.

• Visualization Type: Scatter Plot or Line Chart

• Explanation: Scatter plots or line charts can depict the relationship between total monthly EMI payments and credit scores, revealing any trends or correlations.

**12. Credit Score and Age:**

• Question: Analyze how credit scores vary with the age of customers to understand any age-related patterns in creditworthiness.

• The "Age" column allows for the analysis of how credit scores vary with the age of customers.

• Visualization Type: Box Plot or Scatter Plot

• Explanation: Box plots or scatter plots can effectively show the distribution of credit scores based on the age of customers.

**14. Credit Inquiries and Their Impact:**

• Question: Investigate the impact of the number of credit inquiries on credit scores, exploring whether multiple inquiries affect creditworthiness.

• The "Num\_Credit\_Inquiries" column provides information on credit inquiries, allowing for an exploration of their impact on credit scores.

• Visualization Type: Bar Chart or Area Chart

• Explanation: Bar charts or area charts can illustrate the impact of the number of credit inquiries on credit scores, showing trends over time.

***These tasks are designed to leverage the provided data for meaningful visualizations, offering master's students in finance, economics, business analytics, or data science insights into various aspects of credit scoring and borrower reliability.***