**Credit Score Classification: Case Study**

* The credit score of a person determines the creditworthiness of the person. It helps financial companies determine if you can repay the loan or credit you are applying for.
* Below are all the features in the dataset:
* ID: Unique ID of the record
* Customer\_ID: Unique ID of the customer
* Month: Month of the year
* Name: The name of the person
* Age: The age of the person
* SSN: Social Security Number of the person
* Occupation: The occupation of the person
* Annual\_Income: The Annual Income of the person
* Monthly\_Inhand\_Salary: Monthly in-hand salary of the person
* Num\_Bank\_Accounts: The number of bank accounts of the person
* Num\_Credit\_Card: Number of credit cards the person is having
* Interest\_Rate: The interest rate on the credit card of the person
* Num\_of\_Loan: The number of loans taken by the person from the bank
* Type\_of\_Loan: The types of loans taken by the person from the bank
* Delay\_from\_due\_date: The average number of days delayed by the person from the date of payment
* Num\_of\_Delayed\_Payment: Number of payments delayed by the person
* Changed\_Credit\_Card: The percentage change in the credit card limit of the person
* Num\_Credit\_Inquiries: The number of credit card inquiries by the person
* Credit\_Mix: Classification of Credit Mix of the customer
* Outstanding\_Debt: The outstanding balance of the person
* Credit\_Utilization\_Ratio: The credit utilization ratio of the credit card of the customer
* Credit\_History\_Age: The age of the credit history of the person
* Payment\_of\_Min\_Amount: Yes if the person paid the minimum amount to be paid only, otherwise no.
* Total\_EMI\_per\_month: The total EMI per month of the person
* Amount\_invested\_monthly: The monthly amount invested by the person
* Payment\_Behaviour: The payment behaviour of the person
* Monthly\_Balance: The monthly balance left in the account of the person
* Credit\_Score: The credit score of the person

The Credit\_Score column is the target variable in this problem. You are required to find relationships based on how banks classify credit scores and train a model to classify the credit score of a person.

**import plotly.express as px**

**import plotly.graph\_objects as go**

**import plotly.io as pio**

**pio.templates.default = "plotly\_white"**

1. **plotly.express**: This module provides a high-level interface for creating various types of interactive plots easily. It's particularly useful for quickly generating complex visualizations with minimal code.
2. **plotly.graph\_objects**: This module provides a lower-level interface for creating more customized plots. It allows for fine-tuning of every aspect of the visualization, offering more control over the appearance and behavior of the plots.
3. **plotly.io**: This module provides functions for input and output operations with Plotly plots, such as saving plots to file or displaying them in different formats.