# 1)Normalize Customer Age & Salary for Credit Score Prediction

**Topics:** Normalization (Min-Max), Data Scaling
 **Problem:**
 A bank collected customer data containing:
 age, monthly_salary, credit_score
 Normalize age and salary using **Min-Max Normalization**, and build a dataset ready for ML models.

# 2)Encode Car Brand & Fuel Type for Price Prediction

**Topics:** Label Encoding, One-Hot Encoding
 **Problem:**
 A car resale platform has features:
 brand, fuel, price
 Perform:

- **Label Encoding** for brand
- **One-Hot Encoding** for fuel type
   Prepare the data for ML.

# 3)Binarize Customer Spending for Marketing Segmentation

**Topics:** Binarization
 **Problem:**
 An online store tracks monthly_spending of customers.
 Using a binarizer threshold of **₹5000**, create:

- 1 → High spender
- 0 → Low spender
   Use binarization to build this feature.

# 4)Predict Student Scores Using Linear Regression

**Topics:** Linear Regression
 **Problem:**
 Given data:
 hours_studied → exam_score
 Train a **Linear Regression model** to predict a student's expected score based on hours studied.

# 5)Robust Scaling on Outlier-Heavy Salary Data

**Topics:** RobustScaler

**Problem:**

A dataset of employees contains extreme salary outliers.

Apply **Robust Scaling** to remove the influence of outliers and convert salaries into a more stable scale.