# Telecom Customer Churn Analysis

**Project Objective:-**

The primary objective is to:
Identify key factors influencing customer churn through statistical and visual analysis.

Segment customers based on service usage, tenure, and payment behavior to detect high-risk churn groups.

Provide actionable insights for retention strategies, such as targeted offers for short-tenure customers or improved service bundles.

Lay the groundwork for predictive modeling to forecast potential churn and enable proactive intervention.

## Project Summary:-

The project focuses on Telecom Customer Churn Analysis, aiming to understand the patterns and factors leading to customer attrition in a telecom company. The dataset contains customer demographics, account details, subscribed services, and payment methods. Initial data preprocessing steps included handling missing values, removing duplicates based on unique customer IDs, and transforming categorical variables for analysis.
 Exploratory data analysis revealed that:
26.54% of customers have churned.

Senior citizens show a higher churn rate compared to younger customers.

Customers with shorter tenures (1–2 months) are more likely to churn, while long-term customers tend to stay.

Service adoption varies widely; customers without internet-based services show lower engagement.

Payment method plays a role, with electronic check users more prone to churn.