📊 Customer Churn EDA Summary

This project performs exploratory data analysis (EDA) on a customer churn dataset from a telecom provider. The goal is to understand patterns of customer attrition and identify factors contributing to churn.

🚀 Features

✅ Data cleaning

- Addressed missing or blank `TotalCharges`

- Converted data types for accurate numeric analysis

✅ Univariate Analysis

- Gender distribution

- Senior citizen breakdown

- Churn distribution

✅ Bivariate Analysis

- Examined churn across multiple services:

    - PhoneService

    - MultipleLines

    - InternetService

    - OnlineSecurity

    - OnlineBackup

    - DeviceProtection

- ○ TechSupport

- ○ StreamingTV

- ○ StreamingMovies

- Visualized with grouped countplots using `hue="Churn"`

✅ Subplots

- Arranged 3x3 grid of countplots to clearly compare features side by side

✅ Visualizations

- Seaborn and Matplotlib for consistent, attractive plots

📈 Next Steps

- Investigate numeric columns with histograms or boxplots

- Analyze correlations

- Build a churn prediction model using logistic regression or tree-based methods

- Share insights with business stakeholders

🛠️ Technologies

- Python

- Pandas

- Seaborn

- Matplotlib