Customer Churn Analysis

This project explores a telecom dataset to analyze and visualize factors influencing customer churn. Various preprocessing steps and detailed EDA (Exploratory Data Analysis) were performed using Python libraries like pandas, matplotlib, and seaborn.

Data Cleaning

- Replaced blanks in TotalCharges with 0 and converted it to float.

- Converted SeniorCitizen column from 0/1 to "Yes"/"No" for better readability.

Key Visualizations & Insights

1. Percentage of Churned Customers

- 26.54% of customers have churned.

2. Churn by Gender

- Male and female customers churn at similar rates.

3. Churn by Tenure

- Customers with shorter tenure are more likely to churn.

4. Churn by Contract Type

- Month-to-month contracts have the highest churn rate.

Conclusion

- Short tenure, month-to-month contracts, and other flexible payment methods correlate highly with churn.

- Long-term contracts tend to retain customers better.