Customer Churn Analysis

This analysis explores the customer churn behavior of a telecom company using demographic and service-related data.

1. **Churn Overview**:
   * About **26.5% of customers have churned**, as shown by the pie chart.
   * This indicates a moderately high churn rate, which could significantly impact revenue if not addressed.
2. **Demographics & Churn Patterns**:
   * **Senior Citizens** are more likely to churn compared to younger customers, with the percentage churn among them notably higher in a stacked bar analysis.
   * **Gender** does not show a strong correlation with churn, as both male and female customers churn at similar rates.
3. **Tenure and Loyalty**:
   * The **histogram of tenure** shows that customers with shorter service durations are more likely to churn, suggesting dissatisfaction early in the customer lifecycle.
4. **Service-Based Insights**:
   * Analysis across services like **InternetService, TechSupport, StreamingTV**, etc., using grouped count plots with hue on Churn, reveals:
     + Customers **not using additional services** (like online security or streaming) have a higher churn rate.
     + **Fiber optic users** show more churn compared to DSL, possibly due to price or service issues.