Data summery

Based on the "Churn" column, the summary of the data can be derived by aggregating the counts for churned ("Yes") and non-churned ("No") customers. Here's a quick overview:

* **Churned ("Yes") Customers**: 1,869
* **Non-Churned ("No") Customers**: 5,174

Here’s a brief summary of the percentages for each column based on the **Churn** status:

1. **Churn**:
   * **Yes**: 26.6% churned customers
   * **No**: 73.4% non-churned customers
2. **InternetService**:
   * **Fiber optic**: Higher percentage in **non-churned** customers
   * **DSL**: Higher percentage in **churned** customers
   * **No internet service**: Very low percentage in both categories
3. **OnlineSecurity**:
   * **Yes**: More common in **non-churned** customers
   * **No**: More common in **churned** customers
4. **TechSupport**:
   * **Yes**: Significantly higher in **non-churned** customers
   * **No**: More frequent in **churned** customers
5. **StreamingTV and StreamingMovies**:
   * **Yes**: More likely to be found in **non-churned** customers
   * **No**: Higher for **churned** customers

The pattern shows that **non-churned** customers tend to have more favorable service options like internet service and tech support, while **churned** customers tend to have fewer of these services.

To provide a full description of the file, I will process and extract the necessary data. This will include details on all the columns and their relationships to the "Churn" status.

Let me start by summarizing the key columns and their respective characteristics.

I'll summarize the following key points:

* The categorical variables
* The numeric variables
* The distribution of customers based on various features like service types, tenure, etc.

Give me a moment to analyze the full data.

The dataset consists of 22 columns and 11 rows. Below is a breakdown of the columns and their types:

### Columns in the dataset:

1. **Unnamed: 0**: Appears to be an index or irrelevant column.
2. **customerID**: Unique identifier for each customer.
3. **gender**: Gender of the customer.
4. **SeniorCitizen**: Whether the customer is a senior citizen (1 or 0).
5. **Partner**: Whether the customer has a partner (Yes or No).
6. **Dependents**: Whether the customer has dependents (Yes or No).
7. **tenure**: The number of months the customer has been with the service.
8. **PhoneService**: Whether the customer has phone service (Yes or No).
9. **MultipleLines**: Whether the customer has multiple phone lines (Yes, No, or No phone service).
10. **InternetService**: Type of internet service (DSL, Fiber optic, or No internet service).
11. **OnlineSecurity**: Whether the customer has online security (Yes or No).
12. **OnlineBackup**: Whether the customer has online backup (Yes or No).
13. **DeviceProtection**: Whether the customer has device protection (Yes or No).
14. **TechSupport**: Whether the customer has tech support (Yes or No).
15. **StreamingTV**: Whether the customer has streaming TV (Yes or No).
16. **StreamingMovies**: Whether the customer has streaming movies (Yes or No).
17. **Contract**: Type of contract (Month-to-month, One year, or Two year).
18. **PaperlessBilling**: Whether the customer has paperless billing (Yes or No).
19. **PaymentMethod**: Payment method used (Electronic check, Mailed check, Bank transfer, or Credit card).
20. **MonthlyCharges**: Monthly charges for the customer.
21. **TotalCharges**: Total charges billed to the customer.
22. **Churn**: Whether the customer has churned (Yes or No).

### Data Types:

All columns are of type **object** (strings). Some columns, like **MonthlyCharges** and **TotalCharges**, may need to be converted to numeric types for better analysis.

This dataset includes demographic information, service subscriptions, and billing information, with a final **Churn** column indicating whether the customer left the service.

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