1. **Project Overview**
   This amazing case study analyzes cyclistic's bike share data to identify usage differences between casual riders and annual members with the goal of recommending strategies to convert casual riders into members.

2. **Stakeholder**
   - Cyclistic- Bike share program in chicago
   - Lily Moreno- Marketing Director
   - Analytics Team- Provides data insights

3. **Business Task**
   Determine how annual members and casual riders use Cyclistic bikes differently.

4. **Setup & Tools**
   - VS Code- writing python scripts
   - Python 3.12 + Pandas- data cleaning and analysis
   - Google Drive / OneDrive- storing datasets

5. **Data Cleaning Log**
   Sept 14,2025
   - Opened data_cleaning.py in VS code
   - Installed Pandas (pip install pandas)
   - Error:ModuleNotFoundError: No module named 'pandas' = solved by installing into correct python environment.
   - Ran test script to list files in Raw Data folder.
   - Error:FileNotFoundError(folder mismatch: Raw_Data vs Raw Data) = fixed by correcting the folder path in code.

Sept 15,2025

- Loaded January 2019 CSV into pandas.
- Removed duplicate rows
- Saved cleaned version into Working Data/2019_Janurary_clean.csv
- Plan: repeat cleaning for all months.

6. **Analysis Plan**
   Compare casual vs members usage on:
   - **Day of week usage**
   - **Average ride duration**
   - **Start/End station popularity**
   - **Trip counts across seasons**

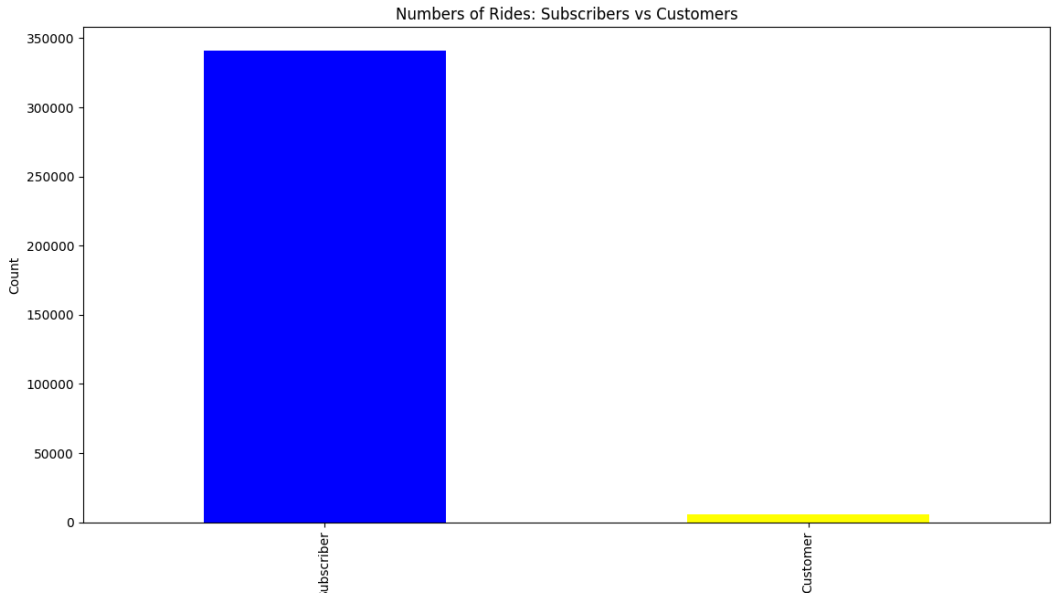

Figure 1: Numbers of Rides - Subscribers vs Customers

- **What it shows: The chart compares the total number of rides between subscribers (annual members) and customers (casual riders)**
- **Observation: Subscribers took significantly more rides than customers.**
- **Interpretation: This suggests that members use Cyclistic bikes more frequently and consistently as part of their daily commuting routines.**

Now lets go back to our Business Question
"How do annual members and casual riders use Cyclistic bikes differently?" Well if you look at the graph members ride much more often and consistently while casual riders use bikes occasionally