⬛ Problem Statement

Uber, as a major player in the ride-sharing industry, handles vast amounts of trip and customer data daily. This data holds immense value when analyzed effectively, enabling insights into customer behavior, operational patterns, trip trends, and demand forecasting. As a Data Analyst/Scientist, the objective is to translate raw ride data into actionable intelligence.

This project focuses on **exploratory data analysis (EDA)** of an Uber ride dataset to extract insights that could guide business decisions and optimize operations. The dataset includes details like ride categories, purposes, dates, locations, miles travelled, and more.

👦🖥 Key Objectives of the Analysis:

This analysis answers **16 specific business-driven questions**, including:

1. In which category do people book the most Uber rides?

2. For which purpose do people book Uber rides the most?

3. At what time do people book cabs the most from Uber?

4. In which months do people book Uber rides less frequently?

5. On which days of the week do people book Uber rides the most?

6. How many miles do people usually book a cab for through Uber?

7. What is the average ride distance (in miles) for each ride purpose?

8. Which location has the highest number of pickups (START)?

9. Which location has the highest number of drop-offs (STOP)?

10. What is the total number of rides taken for Business vs. Personal purposes?

11. Which month had the highest total distance traveled?

12. How does ride frequency vary across weekdays vs. weekends?

13. Which purpose has the highest total distance covered?

14. Which routes have the longest distances?

15. Which trip purposes are associated with the longest distances?

16. How do trip categories and purposes relate to each other?

 Business Value:

- Understand demand trends to manage driver allocation and pricing.

- Identify high-traffic pickup and drop-off zones for strategic expansion.

- Discover peak times and days for better resource planning.

- Recognize key differences between business and personal ride behaviors.

By analyzing this dataset, I aim to uncover meaningful patterns and trends that can help improve decision-making for ride allocation, customer experience, and operational efficiency.