## **SQL Aggregate Functions - ASSIGNMENT WEEK 15**

## 1. Data Dive (10 pts):

#### **Difficulties Faced**

1. Data Type Matching: Ensuring that the data types in MySQL match the dataset columns accurately can be challenging, especially with columns like indebt, isHomeOwner, and Owns\_Car which are boolean values.
2. CSV Format Issues: Sometimes, CSV files may contain formatting issues, such as incorrect delimiters or special characters, which need to be cleaned before importing.

#### **Interesting Finding**

One interesting observation from the dataset is the significant variation in average time spent on social media platforms based on different demographics. For example, younger users tend to spend more time on platforms like Instagram and TikTok, while older users prefer Facebook. This variation highlights the diverse preferences and behaviors across different age groups and can provide valuable insights for targeted marketing strategies.

### **Step 2: Data Fun (20 pts)**

We'll write some SQL queries to uncover two interesting facts about the data.

#### **Fact 1: Average Time Spent on Social Media by Platform**

SELECT platform, AVG(time\_spent) AS avg\_time\_spent

FROM social\_media\_users

GROUP BY platform;

#### **Fact 2: Most Common Interests Among Users**

SELECT interests, COUNT(\*) AS interest\_count

FROM social\_media\_users

GROUP BY interests

ORDER BY interest\_count DESC

LIMIT 1;

### **Step 3: Ask Away (30 pts)**

We'll formulate two questions and find answers using SQL queries.

#### **Question 1: What is the average income of users on different social media platforms?**

SELECT platform, AVG(income) AS avg\_income

FROM social\_media\_users

GROUP BY platform;

#### **Question 2: What is the most popular social media platform in each location?**

SELECT location, platform, COUNT(\*) AS platform\_count

FROM social\_media\_users

GROUP BY location, platform

ORDER BY location, platform\_count DESC;