

## **Business Analysis:**

1. Identify the most common merchants in the United States (Top 20).
2. Identify and list the top 10 categories with the highest frequency.
3. Find the top 10 cities with the most merchants in the United States.
4. Find the most common merchants in the United States and display their average ratings (Top 20).
5. Identify the top 5 states with the most merchants in the United States.
6. Count the number of categories.
7. List the top 20 merchants with the most five-star reviews.
8. Determine the average latitude and longitude coordinates for businesses in each state.
9. Summarize the types and quantities of restaurants for different cuisines (Chinese, American, Mexican).
10. Analyze the review counts for restaurants of different cuisines.
11. Explore the distribution of ratings for restaurants of different cuisines.
12. Analyze and list the top 10 cities with the highest average ratings.

## **II. User Analysis:**

1. Analyze the yearly growth of user sign-ups.
2. Count the "review\_count" for users.
3. Identify and list the most popular users based on their number of fans.
4. Calculate the ratio of elite users to regular users each year.
5. Display the yearly proportions of total users and silent users (those who haven't written reviews).
6. Summarize the yearly statistics for new users, review counts, elite users, tip counts, and check-in counts.
7. Summarize the yearly statistics OF review counts
8. Calculate the cumulative total count of users per year

## **III. Review Analysis:**

1. Count the yearly number of reviews.
2. Summarize the count of helpful, funny, and cool reviews each year.
3. Create a ranking of users based on their total reviews each year.
4. Extract the top 20 common words from reviews.

#### **IV. Rating Analysis:**

1. Analyze the distribution of ratings (1-5).
2. Count the frequency of ratings on each day of the week.
3. Identify the top 5 merchants with the most 5-star ratings.

#### **V. Check-in Analysis:**

1. Count the yearly check-in frequency.
2. Analyze the check-in frequency for each hour of the day.
3. Identify the cities where check-ins are most frequent.
4. Create a ranking of all merchants based on check-in frequency.

#### **VI. Comprehensive Analysis:**

1. Identify the top 5 merchants in each city based on rating frequency, average rating, and check-in frequency.