**Project Proposal: Analyzing Restaurant Accessibility in San Francisco**

**Project Scope:** The purpose of our project is to analyze restaurant accessibility in San Francisco by integrating data from the Yelp API and Walk Score API. We aim to extract relevant details about restaurants within the city limits and evaluate their accessibility via public transportation and pedestrian infrastructure. The goal is to identify patterns in accessibility and highlight potential areas for urban development and business opportunities.

**Data Sources:**

* **Restaurant Data (Yelp API):** Includes details such as restaurant names, coordinates (latitude and longitude), ratings, price ranges, and types of cuisine.
* **Accessibility Data (Walk Score & Transit Score API):** Includes walkability and transit scores for specific locations, reflecting the ease of access for pedestrians and proximity to public transportation.

**Data Transformation:**

**Extract, Transform, Load**

Extract: API, converting to pd dataframe   
Transforming: Drop irrelevant columns/records, rename columns, join with accessibility score, changing data types, create bin (rating, pricing),

Load: exporting as csv/ uploading it to SQL

**Questions to Ask:**

1. **Transportation and Restaurant Success**
   * What relationship exists between public transportation accessibility in San Francisco and the success/popularity of nearby restaurants?
2. **Consumer Behavior**
   * Does proximity to public transport correlate with higher restaurant ratings or increased consumer traffic?
   * Does public transportation increase the density of restaurants or the probability of restaurants opening in the area?
   * Are higher-rated or more expensive restaurants typically located in areas with better accessibility?
3. **Variations Across Types of Transportation and Cuisine**
   * How does the type of transportation (public vs. private) affect the success/popularity of local restaurants?
   * Does the accessibility of transportation affect restaurants differently depending on the type of cuisine they serve?
   * How does transportation accessibility impact restaurants across different price brackets (high-end vs. budget-friendly)?
4. **Quantitative Analysis of Transportation Stops**
   * Quantitatively, how does increasing the number of stops on a train or bus line by 5 affect the surrounding restaurant scene?