Analysis of AirBnB’s in NewYork City

# Hypotheses:

### 1. Hypothesis 1: (Haydn)

Neighborhoods with a higher number of Airbnb listings have a lower average rental price.

Rationale: Our rationale is based on the economic principle of supply and demand, suggesting that an increase in Airbnb listings in popular areas can lead to lower average rental prices. This happens as greater supply meets the high demand, potentially driving down prices in these sought-after neighborhoods.

Categorise Neighbourhood popularity:

Very High : 1000 +

High: 500 - 999

Medium: 100 - 499

Low: 50 - 99

Very Low: 0 - 49

### 2. Hypothesis 2: (Maria)

For the top 10 popular neighbourhoods (by amount of listings) the average daily airbnb rental price is higher than the average daily private apartment rental price.

Rationale: When relocating to a new city, individuals frequently stay in an Airbnb while searching for a private apartment. Our findings can help calculate the percentage of your budget that will go toward Airbnb expenses during this search period.

### 3. Additional Hypothesis:

The higher the number of listings per host, the higher the ratings (2a) and the quantity of reviews (2b).

## 

# 

# Project Projectory:

### 

|  | Haydn’s Task | Maria’s Task | EOD Goal |
| --- | --- | --- | --- |
| Monday |  |  | * ~~Select relevant datasets from sources (CSV, web scraping, APIs).~~ * ~~Create hypotheses.~~ * ~~Plan project trajectory using tools.~~ * ~~Extract and understand the data from selected sources.~~ |
| Tuesday |  |  | * ~~Understand the significance of each data field.~~ * ~~Sketch an Entity-Relationship Diagram (ERD).~~ * ~~Create a functional database from the ERD, defining data types for columns.~~ * ~~Transform and sanitize data for analysis goals.~~ * ~~Load cleaned data into the database, maintaining integrity.~~ |
| Wednesday |  |  | * ~~Execute SQL queries for insights using commands (JOIN, GROUP BY, ORDER BY, CASE).~~ * ~~Utilize SQL functions for data summarization (mean, max, min, std)~~ |
| Thursday |  |  | * ~~Develop visualizations using Python libraries.~~ * ~~Compile a comprehensive report of analysis and insights.~~ * ~~Design and prepare a presentation summarizing the project, challenges, insights, and outcomes.~~ |