METHODOLOGY AND ANALYSIS FRAMEWORK:

This comprehensive analysis examines international tourism trends in Buenos Aires through three key dimensions:

1. Seasonal Trends
2. Non-Resident Entry Classifications at Buenos Aires Airport
3. Average Duration of Tourist Stays

The analysis follows a systematic approach including:

● Data preparation and cleaning
● Exploratory data analysis
● Statistical analysis
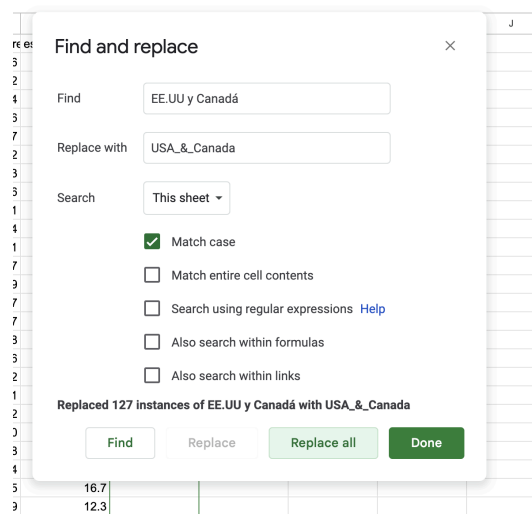● Data visualization and interpretation

Each section presents key findings supported by visualizations and statistical evidence, providing insights into Buenos Aires' tourism dynamics over the past decade.

Part 1: Seasonal Trends (2014- July 2024)

Data Cleaning Steps on Ezeiza Airport Non-Resident Arrivals excel file
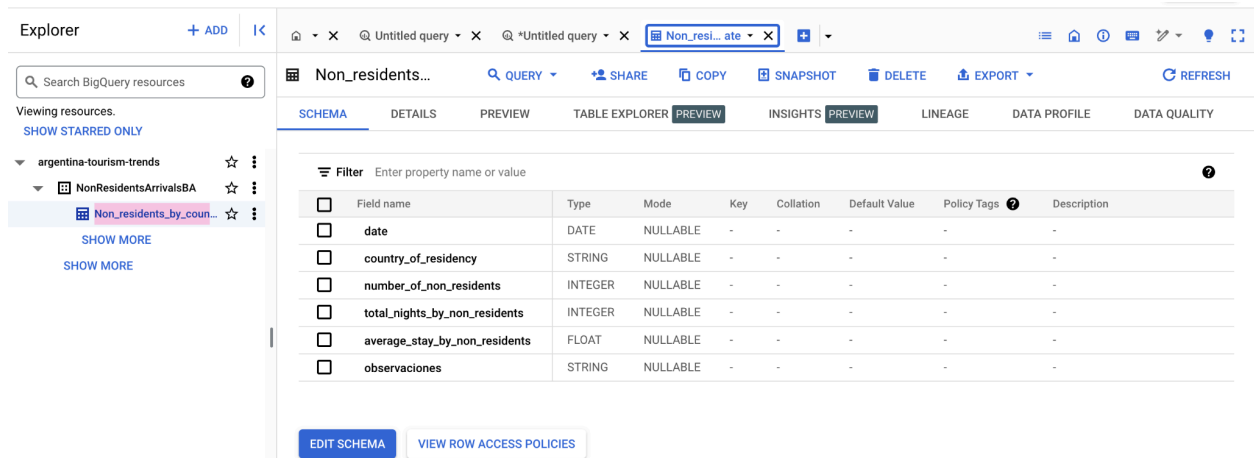
1. Excel Data Cleanup Protocol:
   ○ Remove duplicate entries
   ○ Standardize date formatting
   ○ Verify data consistency across columns (review statistics & empty cells)
   ○ Exclude COVID period data points
   ○ Translate column headers from Spanish to English

Data Exploration and Organization: BigQuery SQL Implementation

SQL script:
https://github.com/arigiachi/Arianna_giachini_data_analytics_portfolio/blob/main/total_number_non_Residents_entering_BA.sql

Data visualization and interpretation:

1. Market Share Distribution:
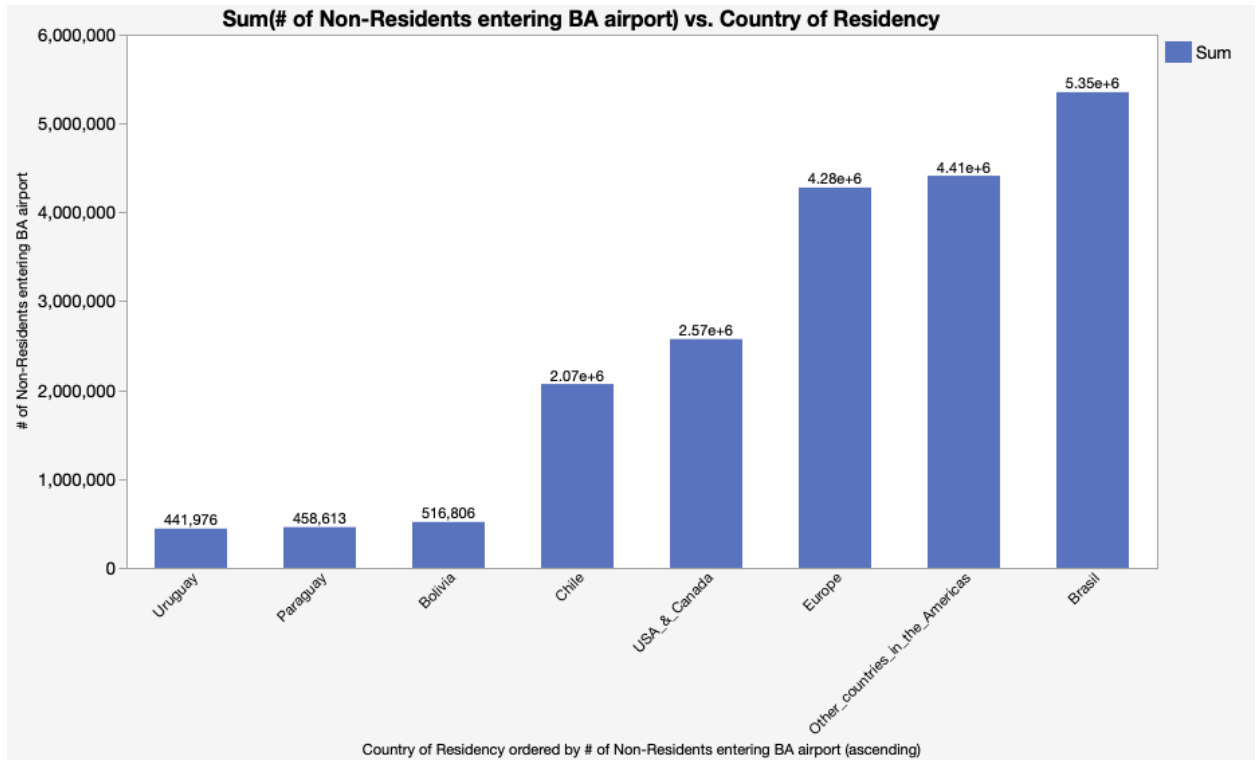
Top 3 Markets (~70% of total market):

- Brazil: ≈27% of total visitors
- Europe: ≈21% of total visitors
- America Continent (except USA & Canada): ≈21% of total visitors

Mid-Tier Markets (~23% market):

- USA & Canada: ≈13% of total
- Chile: ≈10% of total
- Combined: ≈23% of market

Lower-Volume Markets:

- Bolivia, Paraguay, Uruguay combined: ≈8% of total
- Each representing approximately 2-3% individually

2. Variability in Market Share:

Mean(# of Non-Residents entering BA airport) vs. Country of Residency

- Brasil's large standard deviation bars indicates high year-to-year volatility in Brazilian tourism
- Europe and other American countries suggest consistent, but varying annual visitor patterns.
- USA, Canada, and Chile with moderate-sized error bars suggests more stable year-to-year patterns than top markets
- Uruguay, Paraguay, and Bolivia's small error bars, suggests reliable, consistent annual tourism flow

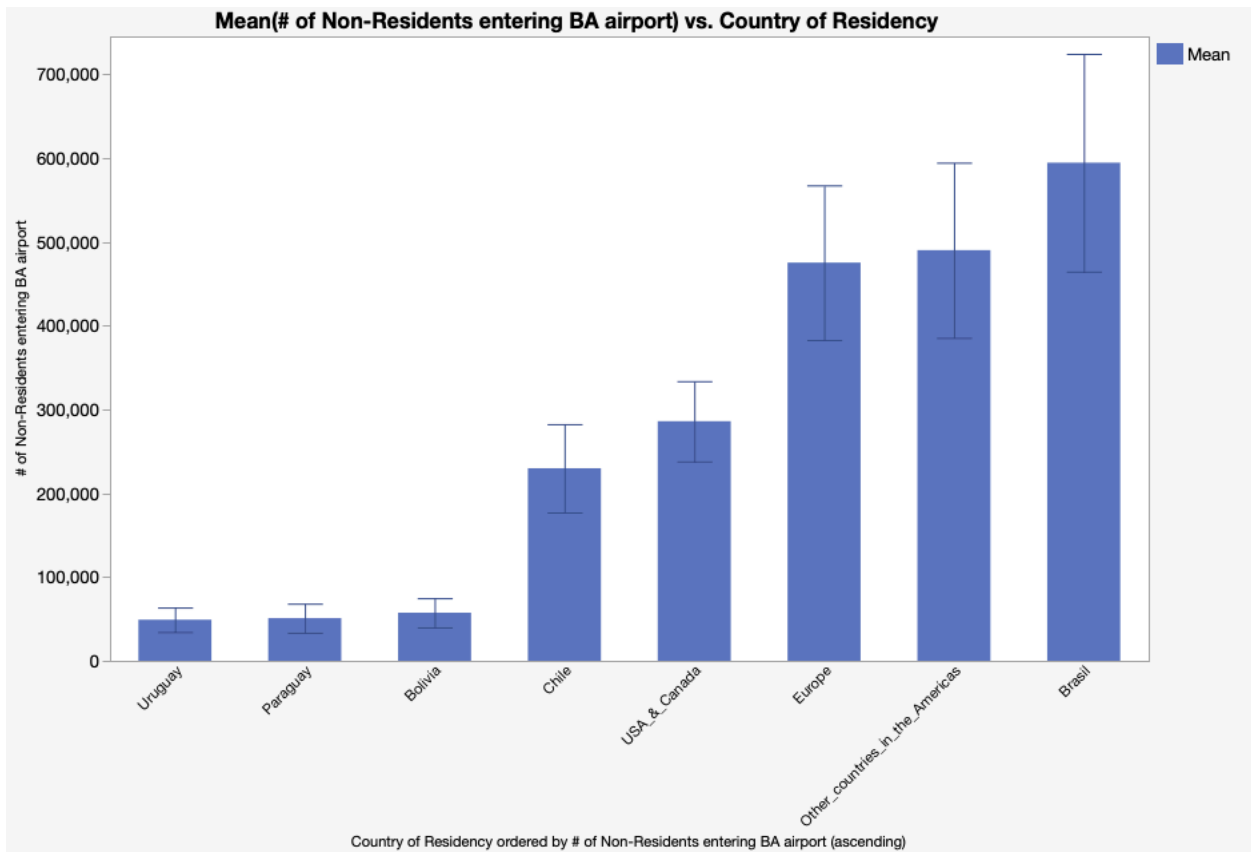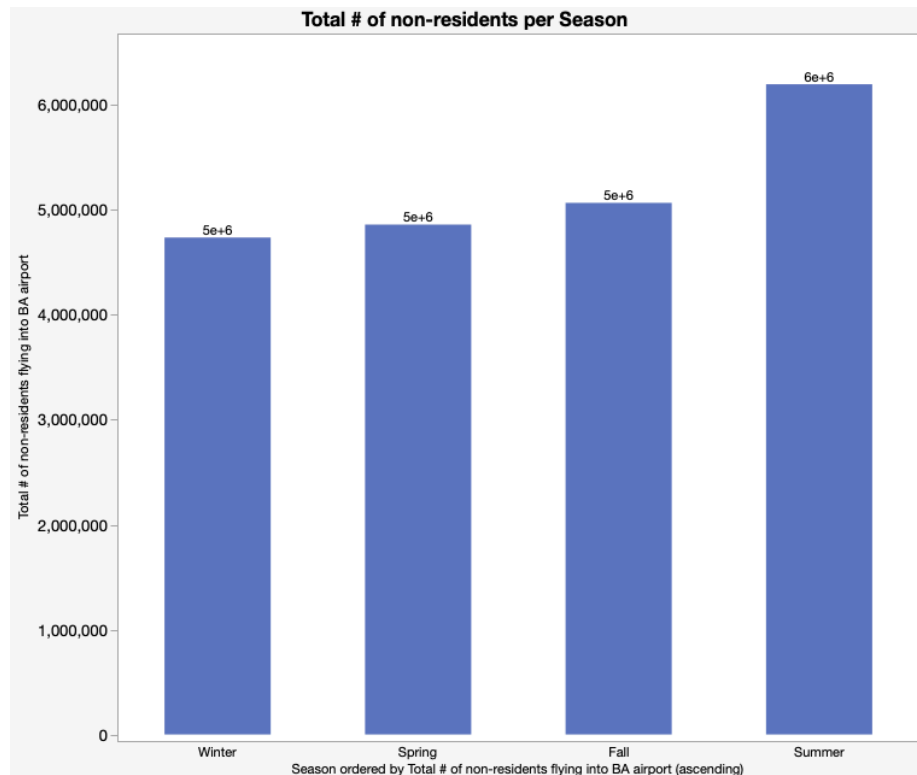**METHODOLOGY AND ANALYSIS FRAMEWORK:**

3. Seasonal Trends (2014 - July 2024):

SQL scripts:

https://github.com/arigiachi/Arianna_giachini_data_analytics_po
rtfolio/blob/main/seasonal_tourism_analysis.sql

Total # of non-residents per Season

The data demonstrates a progressive increase in visitor numbers across seasons:

- Winter to Spring: A modest 2.53% increase, suggesting the beginning of tourism season
- Spring to Fall: A moderate 4.32% growth, indicating building momentum
- Fall to Summer: A substantial 22.29% surge, marking the peak tourism period

This pronounced seasonal variation, particularly the dramatic increase during summer months, suggests that Buenos Aires' tourism industry is heavily influenced by seasonal factors. The significant summer surge (22.29%) compared to other seasonal transitions highlights the city's strong appeal as a summer destination.

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4. Seasonal Trends by Country (2014 - July 2024):

SQL script:

https://github.com/arigiachi/Arianna_giachini_data_analytics_po
rtfolio/blob/main/avg_stay_by_non_resident_in_BA.sql

Total number of non residents arriving to Ezeiza vs. Country of Residency
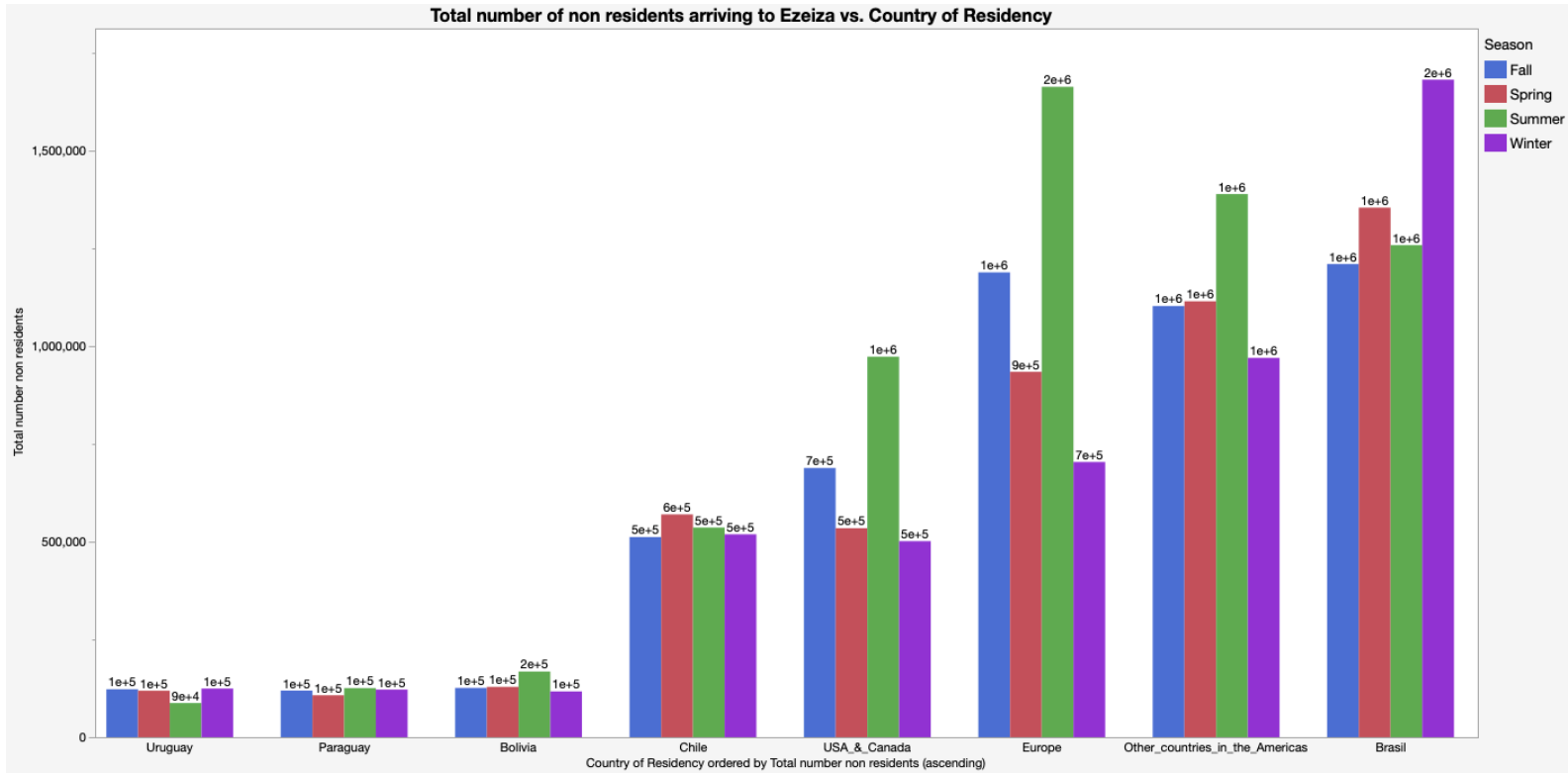
Overall interesting patterns:

1. Distance correlation: Countries further away from Argentina show stronger seasonal variations.
2. Brazil's reverse pattern: Unique among all source markets. Suggests reverse seasonal travel (escaping Brazilian summer).
3. Regional stability: Neighboring countries show more balanced patterns.
   a. Chilean visitor patterns remain notably consistent throughout the year, maintaining stable numbers between 500,000-600,000 visitors across all seasons, reflecting year-round travel patterns likely influenced by geographical proximity and business relationships.

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4. Summer dominance and Hemisphere effect: Peak season for all except Brazil. Northern Hemisphere countries prefer Southern Hemisphere summer

    a. Europe: European tourism demonstrates strong seasonal variation, with visitor numbers increasing by 185% from winter (700,000 visitors) to summer peak (2 million visitors), aligning with traditional European vacation patterns.

    b. While Other American countries demonstrate stable year-round visitation around 1 million visitors, USA & Canada show a 100% seasonal increase from winter to summer, echoing European travel patterns.

    c. USA & Canada visitor patterns demonstrate a 100% increase from winter lows (500,000) to summer peaks (1 million), reflecting typical Northern Hemisphere vacation preferences with a clear 2x seasonal variation.

Part 2: Tourist Entry Classifications at Buenos Aires Airport (2014- July 2024)

Data Cleaning Steps on "Non Resident Tourists - Motive for Entry" excel file

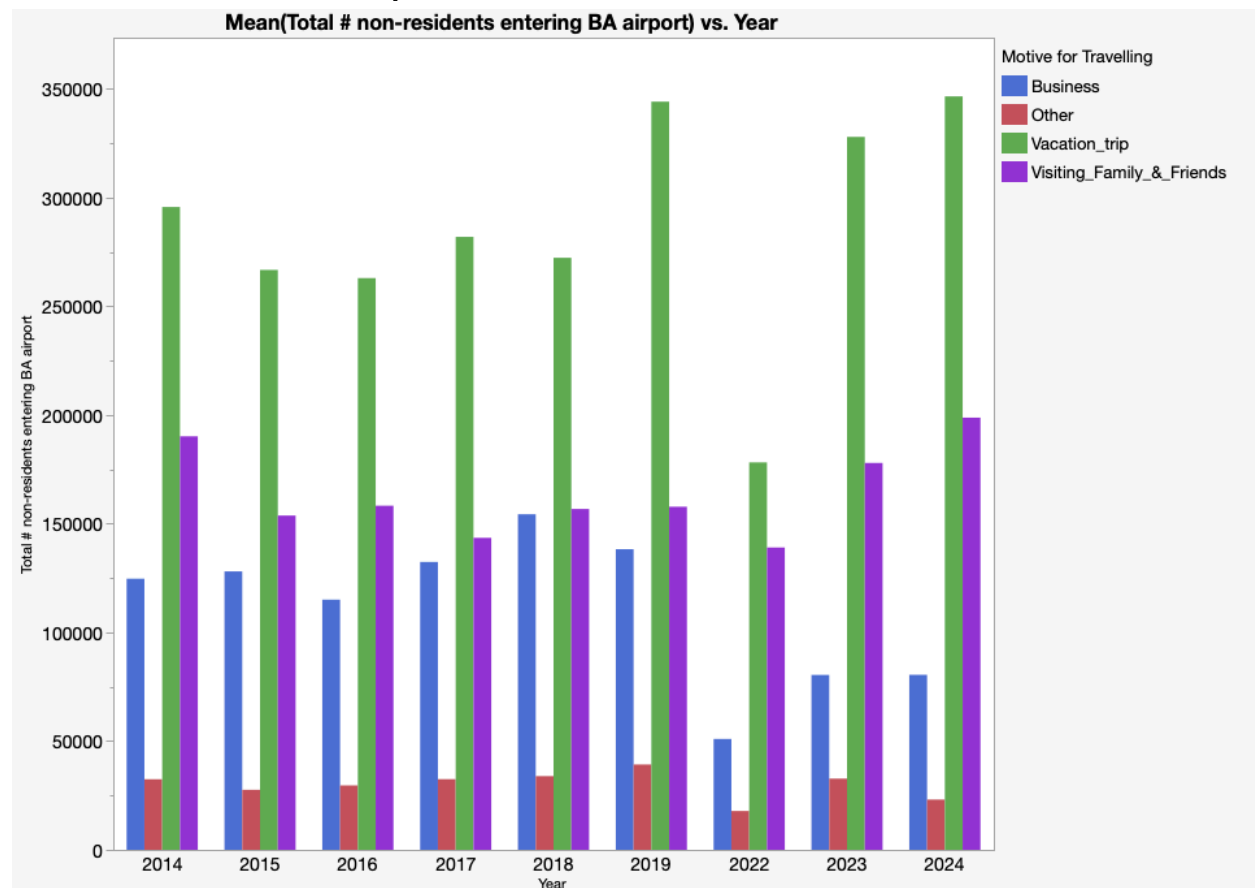<u>Excel Data Cleanup Protocol:</u>

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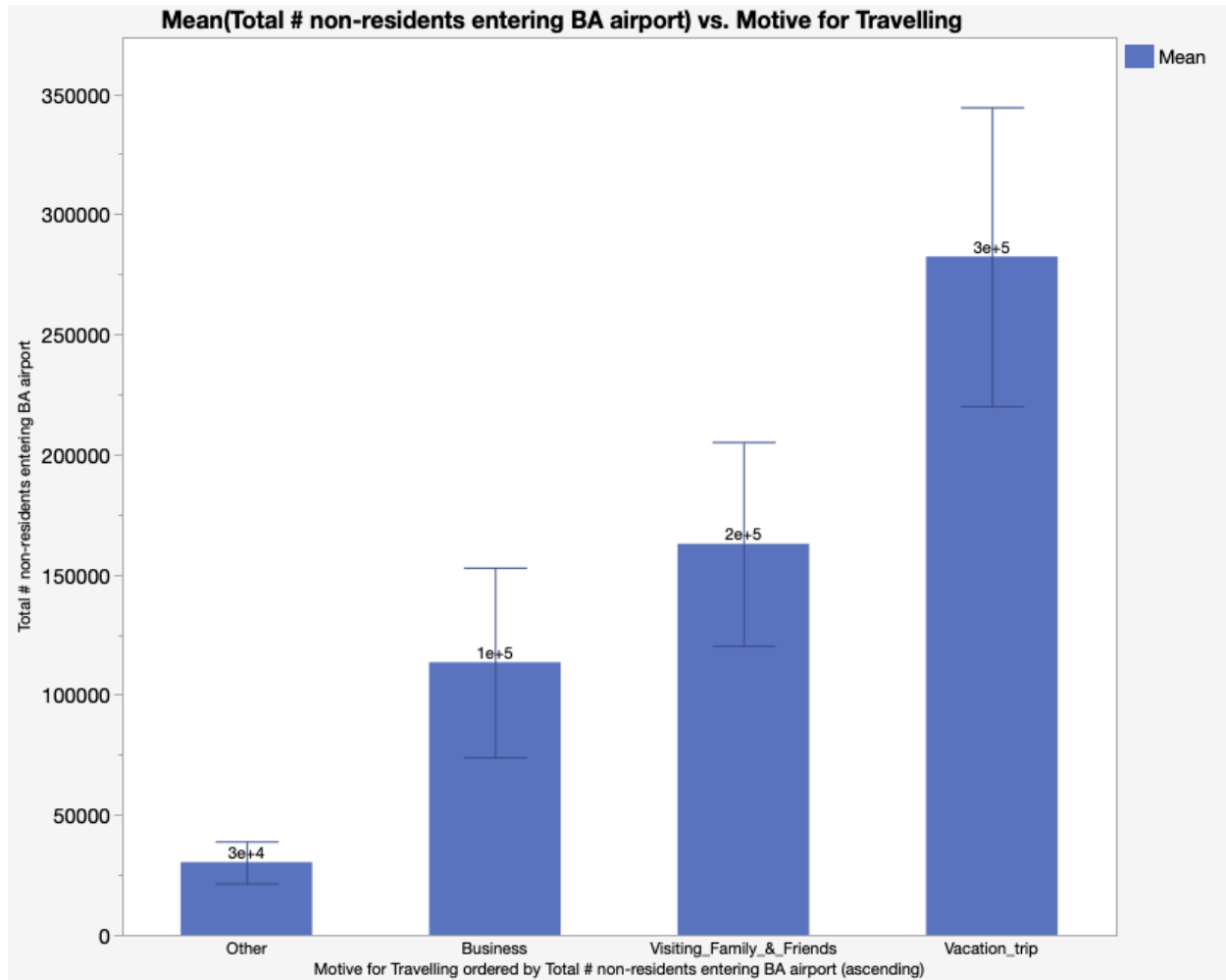**Data Exploration and Organization: BigQuery SQL Implementation**

SQL scripts:

https://github.com/arigiachi/Arianna_giachini_data_analytics_portfolio/blob/main/reason_of_entry_analysis.sql

Data visualization and interpretation:

Notable Patterns:

- Vacation comprises approximately 50% of total arrivals, followed by family and friend visits at 27%, business travel at 18%, and other purposes accounting for 5% of total visitor volume.
- Non-overlapping error bars indicate statistically significant differences. Clear separation between categories

Part 3: Average Duration of Non-Residents Stay (2014- July 2024):

Data Cleaning Steps on "Non Resident Tourists - Motive for Entry" excel file

Excel Data Cleanup Protocol:

- Remove duplicate entries
- Standardize date formatting
- Verify data consistency across columns (review statistics & empty cells)
- Exclude COVID period data points
- Translate column headers from Spanish to English

Data Exploration and Organization: BigQuery SQL Implementation

SQL scripts:
https://github.com/arigiachi/Arianna_giachini_data_analytics_portfolio/blob/main/avg_stay_by_non_resident_in_BA.sql

Data visualization and interpretation:
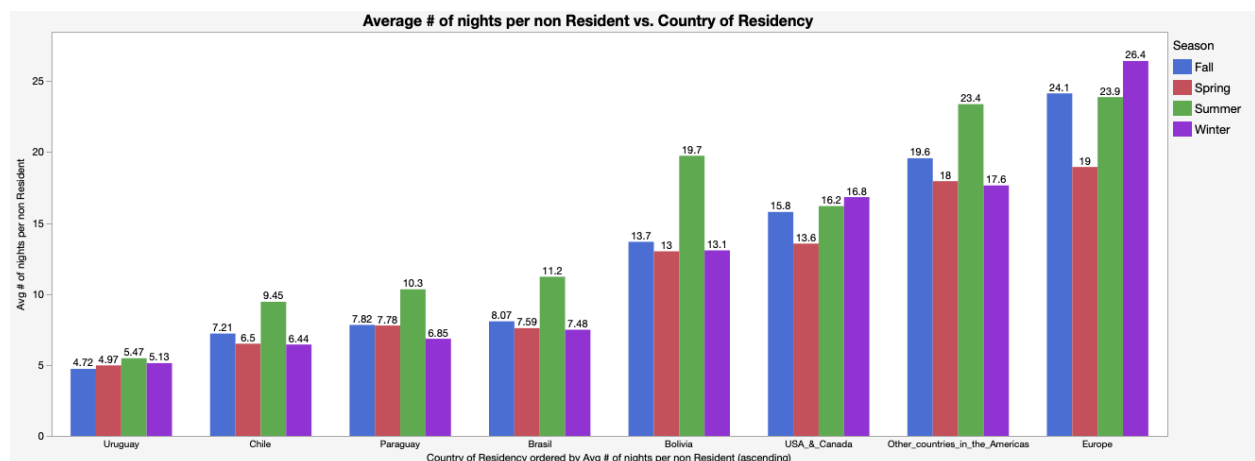
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Overall, interesting trends:

- There is a clear relationship between trip duration and country of residency. The further the country of residency from Argentina, the longer the trip duration. Europeans stay 4-5x longer than regional visitors. Long-haul travelers generally stay 2-3x longer than regional visitors. Regional neighbors show minimal seasonal variation
- Most countries show summer peaks. Summer consistently shows longer stays across most countries