**Briefing: Data Cleaning and Analysis Steps (Summer Olympics 1976-2008)**

**Overview**

This document summarizes the steps performed to load, clean, and analyze the Summer Olympics medals dataset covering the years 1976 through 2008.

**Data Loading**

- Loaded the CSV file Summer-Olympic-medals-1976-to-2008.csv.  
- Verified basic structure (columns such as City, Year, Sport, Discipline, Event, Athlete, Gender, Country\_Code, Country, Event\_gender, Medal).

**Standardization and Cleaning**

- Harmonized column names to a consistent style (e.g., title case, underscores).  
- Ensured Year is numeric and filtered to valid Olympic years.  
- Filtered rows to valid medals (Gold, Silver, Bronze).  
- Filled or standardized Gender labels when present.  
- Preserved key fields: Year, Country, Sport, Gender, Event\_gender, Athlete, Medal.  
- Added or confirmed Medal\_Points mapping where applicable (Gold 3, Silver 2, Bronze 1).

**Quality Checks**

- Spot-checked head of the cleaned dataset.  
- Verified distributions for Medal and Gender.  
- Ensured no missing Years after coercion.

**Exploratory Analysis**

- Computed medal counts and shares overall and by Gender.  
- Aggregated medals by Country and by Sport; identified top 10 with remainder grouped as Other.  
- Calculated year-by-year medal-type shares for trend visualization.