

Olympics Data Analysis

The file `athlete_events.csv` contains 271116 rows and 15 columns. Each row corresponds to an individual athlete competing in an individual Olympic event (athlete-events). The columns are:

1. ID - Unique number for each athlete
2. Name - Athlete's name
3. Sex - M or F
4. Age - Integer
5. Height - In centimeters
6. Weight - In kilograms
7. Team - Team name
8. NOC - National Olympic Committee 3-letter code
9. Games - Year and season
10. Year - Integer
11. Season - Summer or Winter
12. City - Host city
13. Sport - Sport
14. Event - Event
15. Medal - Gold, Silver, Bronze, or NA

The file `regions.csv` contains 230 rows and 3 columns.

1. NOC (National Olympic Committee 3 letter code)
2. Country name (matches with regions in `map_data("world")`)
3. Notes

Tasks:

1. Import the datasets and join the data based on appropriate column.
2. Check for columns that have **nan** values.
3. For numeric columns, replace nan values with the column's mean.
4. Which are the top 10 countries with most gold, silver, bronze medal?
5. Find the distribution of gold medalists according to their age.
6. Which is the highest playing sport that men play who are above 55 years?
7. Which is the highest playing sport that women play who are above 36 years?
8. Show a scatter plot for gold winners according to their age and weight. What do you see?
9. What sports are played by men and women who weighs over 120? Is less sports event played by woman over 120kg?