

World Cup Data Analysis

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Introduction

- Data analysis on World cup data from 1930 - 2018
- Based all matches that occurred
- Found via <https://www.kaggle.com/datasets/abecklas/fifa-world-cup>
- Contains over 500 records and 15 columns of data

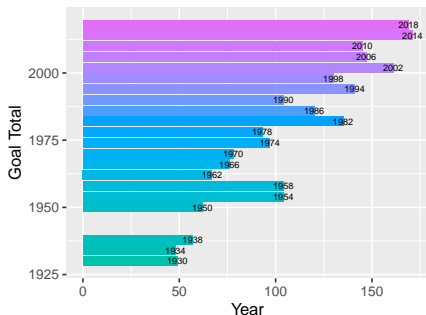
Data description

```
## 'data.frame':      2 obs. of  15 variables:
##  $ year          : int  1930 1930
##  $ country       : chr   "Uruguay" "Uruguay"
##  $ city          : chr   "Montevideo" "Montevideo"
##  $ stage         : chr   "Group 1" "Group 4"
##  $ home_team     : chr   "France" "Belgium"
##  $ away_team     : chr   "Mexico" "United States"
##  $ home_score    : int    4 0
##  $ away_score    : int    1 3
##  $ outcome       : chr   "H" "A"
##  $ win_conditions: chr   "" ""
##  $ winning_team  : chr   "France" "United States"
##  $ losing_team   : chr   "Mexico" "Belgium"
##  $ date          : chr   "1930-07-13" "1930-07-13"
##  $ month         : chr   "Jul" "Jul"
##  $ dayofweek     : chr   "Sunday" "Sunday"
```

Questions for the analysis

- 1 What is the trend of total goals scored over every world cup?
- 2 What is the trend of average goals scored per match over every world cup?
- 3 Which nations have won the most world cups?
- 4 Which nations have won the world cup on home soil?
- 5 Who are the top 6 nations with the most world cup match wins?
- 6 Who are the top 6 nations with the best average goals per match in the world cup?
- 7 Who are the biggest world cup losers of all time?

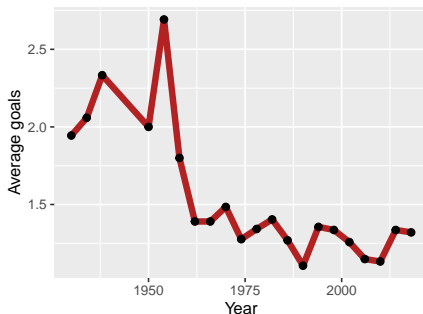
1. What is the trend of total goals over every world cup?



- Total goals have increased overtime
- 2014 had the most number of goals scored with 171
- There is a gap in between 1938-1950. Possibly due to WWII (1939-45)

2. What is the trend of average goals scored per match over every world cup?

- The average goals per match is decreasing overtime
- Peaking at 2.7 in 1954
- Some world cups had an average goals per match 1.1
- Stayed fairly consistent/similar since 1962 and onwards



3. Which nations have won the most world cups?

Nation	Wins
Brazil	5
Italy	4
West Germany	3
Argentina	2
France	2
England	1
Germany	1
Spain	1
Uruguay	1

- Brazil is #1!
- Not far behind is Italy with 4
- France the recent winners have 2
- Germany have a total of 4 (if we include both West Germany)

4. Which nations have won the world cup on home soil?

- All have only won once
- 5/9 teams have won the world cup on home turf
- Most recent winner on home turf was France in 1998

Nation	Year
Uruguay	1930
Italy	1934
England	1966
Argentina	1978
France	1998

5. Who are the top 6 nations with the most world cup match wins?

Nation	Total_wins
Brazil	76
Argentina	47
Italy	46
West Germany	40
France	36
Germany	31
Spain	31

- Brazil dominates
- Germany really have 71
- Brazil and Germany dominate in wins

6. Who are the top 6 nations with the best average goals per match in the world cup?

- Hungary are #1!
- Turkey, Yugoslavia, Hungary all have done well
- We assume this is due to them having less matches

Nation	Average_goals
Hungary	2.75
Turkey	2.44
Yugoslavia	2.13
Germany	2.11
Brazil	2.09
West Germany	2.08

7. Who are the biggest world cup losers of all time?

Nation	Goals	Matches
Canada	0	3
China PR	0	3
Zaire	0	3

- A 'Biggest loser' is a nation with no wins nor goals
- Canada and China are fairly big nations yet have had poor success
- Canada will be attending Qatar 2022

Thank you

- There is still plenty of other things to consider!!!