


# FIFA WORLD CUP DATA ANALYSIS

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- 
- Several thin, white, parallel lines of varying lengths and slopes are positioned on the right side of the slide, extending from the top right towards the bottom left.

# INTRODUCTION

**Data Analysis** is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, while being used in different business, science, and social science domains.

The analytics team of the Football World Cup association and FIFA association anywhere in the world would love to check out through data analysis of each and every match leading to a well-organized and fruitful information. My analysis contains data on host teams, all stadiums, most supported team and teams which are most successful.

# DASHBOARD





# SCOPE OF ANALYSIS

The system wants to see and analyze the sales trend month-wise and product-wise and work upon the lagging segments and outperforming employees accordingly. The Analytics team also wants to create analyze the database in depth to help the super store grow exponentially. The Analytics team wishes to answer the following objectives: -

- Half time goals scored by the home and away team year wise.
- No of goals scored in finals until now.
- Analyzing the total attendance of crowd in Group matches, semifinals and Finals.
- Overall Attendance for a particular city until now.
- No. of people came to view match for particular team.
- Country winning the maximum World Cups.
- Goals scored by home teams and away team
- Analyzing difference between total goals scored and total goals conceded by teams

Aim of this project is to answer the above objectives in the form of visualization by creating a dashboard to convey the answers effectively and efficiently.

# STEP1.REMOVING BLANK CELLS FROM THE DATASET

## STEP2.REMOVING COLUMNS WHICH ARE NOT PROPERLY DEFINED OR NOT CRUCIAL TO OUR ANALYSIS

Step3. Giving proper and appropriate column names.

Step4. Removing Duplicate Values

Step5. Improvising Proper Data Formatting

|      |                     |                   |                         |         |            |                |   |               |
|------|---------------------|-------------------|-------------------------|---------|------------|----------------|---|---------------|
| 1990 | 13 Jul 1990 - 15:00 | Group 1           | Pocitos                 | Uruguay | Montevideo | France         | 4 | 1 Mexico      |
| 1990 | 13 Jul 1990 - 15:00 | Group 4           | Parque Central          | Uruguay | Montevideo | USA            | 3 | 0 Belgium     |
| 1990 | 14 Jul 1990 - 12:45 | Group 2           | Parque Central          | Uruguay | Montevideo | Yugoslavia     | 2 | 1 Brazil      |
| 1990 | 14 Jul 1990 - 14:50 | Group 3           | Pocitos                 | Uruguay | Montevideo | Romania        | 3 | 1 Peru        |
| 1990 | 15 Jul 1990 - 16:00 | Group 1           | Parque Central          | Uruguay | Montevideo | Argentina      | 1 | 0 France      |
| 1990 | 16 Jul 1990 - 14:45 | Group 1           | Parque Central          | Uruguay | Montevideo | Chile          | 3 | 0 Mexico      |
| 1990 | 17 Jul 1990 - 12:45 | Group 2           | Parque Central          | Uruguay | Montevideo | Yugoslavia     | 4 | 0 Bolivia     |
| 1990 | 17 Jul 1990 - 14:45 | Group 4           | Parque Central          | Uruguay | Montevideo | USA            | 3 | 0 Paraguay    |
| 1990 | 18 Jul 1990 - 14:30 | Group 3           | Estadio Centenario      | Uruguay | Montevideo | Uruguay        | 1 | 0 Peru        |
| 1990 | 19 Jul 1990 - 12:50 | Group 1           | Estadio Centenario      | Uruguay | Montevideo | Chile          | 1 | 0 France      |
| 1990 | 19 Jul 1990 - 15:00 | Group 1           | Estadio Centenario      | Uruguay | Montevideo | Argentina      | 6 | 3 Mexico      |
| 1990 | 20 Jul 1990 - 13:00 | Group 2           | Estadio Centenario      | Uruguay | Montevideo | Brazil         | 4 | 0 Bolivia     |
| 1990 | 20 Jul 1990 - 15:00 | Group 4           | Estadio Centenario      | Uruguay | Montevideo | Paraguay       | 1 | 0 Belgium     |
| 1990 | 21 Jul 1990 - 14:50 | Group 3           | Estadio Centenario      | Uruguay | Montevideo | Uruguay        | 4 | 0 Romania     |
| 1990 | 22 Jul 1990 - 14:45 | Group 1           | Estadio Centenario      | Uruguay | Montevideo | Argentina      | 3 | 1 Chile       |
| 1990 | 26 Jul 1990 - 14:45 | Semi-finals       | Estadio Centenario      | Uruguay | Montevideo | Argentina      | 6 | 1 USA         |
| 1990 | 27 Jul 1990 - 14:45 | Semi-finals       | Estadio Centenario      | Uruguay | Montevideo | Uruguay        | 6 | 1 Yugoslavia  |
| 1990 | 30 Jul 1990 - 14:15 | Final             | Estadio Centenario      | Uruguay | Montevideo | Uruguay        | 4 | 2 Argentina   |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Stadio Benito Mussolini | Italy   | Turin      | Austria        | 3 | 2 France      |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Giorgio Ascarelli       | Italy   | Naples     | Hungary        | 4 | 2 Egypt       |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | San Siro                | Italy   | Milan      | Switzerland    | 3 | 2 Netherlands |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Littoriale              | Italy   | Bologna    | Sweden         | 3 | 2 Argentina   |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Giovanni Berta          | Italy   | Florence   | Germany        | 5 | 2 Belgium     |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Luigi Ferraris          | Italy   | Genoa      | Spain          | 3 | 1 Brazil      |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Nazionale PNF           | Italy   | Rome       | Italy          | 7 | 1 USA         |
| 1994 | 27 May 1994 - 16:30 | Preliminary round | Littorio                | Italy   | Trieste    | Czechoslovakia | 2 | 1 Romania     |
| 1994 | 31 May 1994 - 16:30 | Quarter-finals    | Stadio Benito Mussolini | Italy   | Turin      | Czechoslovakia | 3 | 2 Switzerland |
| 1994 | 31 May 1994 - 16:30 | Quarter-finals    | San Siro                | Italy   | Milan      | Germany        | 2 | 1 Sweden      |
| 1994 | 31 May 1994 - 16:30 | Quarter-finals    | Giovanni Berta          | Italy   | Florence   | Italy          | 1 | 1 Spain       |
| 1994 | 31 May 1994 - 16:30 | Quarter-finals    | Littoriale              | Italy   | Bologna    | Austria        | 2 | 1 Hungary     |
| 1994 | 01 Jun 1994 - 16:30 | Quarter-finals    | Giovanni Berta          | Italy   | Florence   | Italy          | 1 | 0 Spain       |

| Order ID | Discount | Unit Price | Shipping | Customer ID | Customer Name       | Ship Mode      | Customer Segment | Product Category | Product Sub-Category | Product Container |
|----------|----------|------------|----------|-------------|---------------------|----------------|------------------|------------------|----------------------|-------------------|
| Critical | \$0.06   | \$9.48     | \$7.29   | 11          | Marcus Dunk         | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.00   | \$4.42     | \$4.99   | 15          | Timothy Ree         | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.07   | \$3,502.14 | \$8.73   | 53          | Sidney Russ         | Delivery Truck | Corporate        | Technology       | Office Machines      | Jumbo Box         |
| Critical | \$0.06   | \$8.57     | \$6.14   | 123         | Shawn Stern         | Regular Air    | Home Office      | Office Supplies  | Scissors, Rulers     | Small Pack        |
| Critical | \$0.04   | \$18.97    | \$9.54   | 136         | Dale Gillespi       | Regular Air    | Small Business   | Office Supplies  | Paper                | Small Box         |
| Critical | \$0.09   | \$10.98    | \$3.37   | 136         | Dale Gillespi       | Regular Air    | Small Business   | Office Supplies  | Scissors, Rulers     | Small Pack        |
| Critical | \$0.03   | \$22.84    | \$11.54  | 142         | Brooke Wee          | Regular Air    | Small Business   | Office Supplies  | Paper                | Small Box         |
| Critical | \$0.05   | \$10.98    | \$3.37   | 144         | Marguerite McDougal | Regular Air    | Small Business   | Office Supplies  | Scissors, Rulers     | Small Pack        |
| Critical | \$0.09   | \$32.98    | \$5.50   | 151         | Geoffrey            | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.09   | \$2.88     | \$0.70   | 152         | Kent Ki             | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.01   | \$95.99    | \$4.90   | 156         | Diana               | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.05   | \$1.88     | \$1.49   | 171         | Christi             | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.02   | \$49.99    | \$19.99  | 181         | Wesley              | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.02   | \$49.99    | \$19.99  | 184         | Phillip             | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.00   | \$161.55   | \$19.99  | 197         | Samar               | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.00   | \$161.55   | \$19.99  | 198         | Leroy               | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.06   | \$279.81   | \$23.19  | 234         | Don C               | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.02   | \$2.58     | \$1.30   | 250         | Brend               | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.02   | \$65.99    | \$3.90   | 250         | Brend               | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.03   | \$8.34     | \$2.64   | 256         | Irene L             | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.04   | \$1.98     | \$0.70   | 276         | Lucille             | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.03   | \$55.99    | \$5.00   | 282         | Vickie              | Regular Air    | Home Office      | Furniture        | Office Furnishings   | Small Pack        |
| Critical | \$0.09   | \$28.48    | \$1.99   | 288         | Patricia            | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.08   | \$65.99    | \$4.99   | 288         | Patricia            | Regular Air    | Small Business   | Office Supplies  | Envelopes            | Small Box         |
| Critical | \$0.06   | \$276.20   | \$24.49  | 338         | Curtis O'Connor     | Regular Air    | Corporate        | Furniture        | Office Furnishings   | Small Pack        |

Remove Duplicates

To delete duplicate values, select one or more columns that contain duplicates.

☒ My data has headers

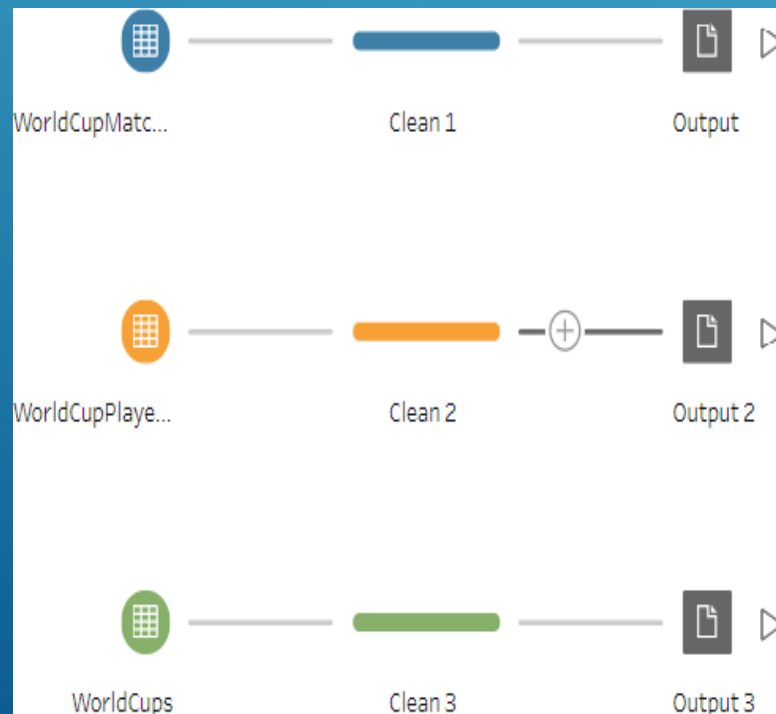
Columns

☒ Order Priority  
☒ Discount  
☒ Unit Price  
☒ Shipping Cost  
☒ Customer ID  
☒ Customer Name

OK Cancel

## STEP 6. EXCLUDING THE NULL VALUES FROM THE DATA.

We'll be using Tableau prep for this work as it'll make the work simple and faster because we might not know how many null values could be there in this huge data set. Tableau helps us doing one step cleaning with ease.



The screenshot shows the Tableau Prep Builder interface. On the left, the "Connections" pane lists three data sources: "WorldCupMatches.xlsx", "WorldCupPlayers.xlsx", and "WorldCups.xlsx". The "Tables" pane shows "WorldCupMatches" selected. The main workspace displays a flow with three steps: "WorldCupMatc...", "Clean 2", and "Output 2". The "Output 2" step is highlighted with a blue box. Below the flow, the "Output 2" pane shows a preview of the data being cleaned, with columns: RoundID, MatchID, Team Initials, Coach Name, Line-up, Shirt Number, Player Name, Position, and Event. The data is filtered to show only rows where the "Event" column is not null.

| RoundID | MatchID | Team Initials | Coach Name          | Line-up | Shirt Number | Player Name      | Position | Event     |
|---------|---------|---------------|---------------------|---------|--------------|------------------|----------|-----------|
| 2011    | 1.096   | FRA           | CAUDRON Raoul (FRA) | S       | 0            | Alex THEROT      | GK       | xx/0      |
| 2011    | 1.096   | MEX           | LUQUE Juan (MEX)    | S       | 0            | Oscar BONFIGLIO  | GK       | xx/0      |
| 2011    | 1.096   | FRA           | CAUDRON Raoul (FRA) | S       | 0            | Marcel LANGILLER | xx/0     | G40'      |
| 2011    | 1.096   | MEX           | LUQUE Juan (MEX)    | S       | 0            | Juan CARRENO     | xx/0     | G70'      |
| 2011    | 1.096   | FRA           | CAUDRON Raoul (FRA) | S       | 0            | Ernest LIBERATI  | xx/0     | xx/0      |
| 2011    | 1.096   | MEX           | LUQUE Juan (MEX)    | S       | 0            | Rafael GARZA     | C        | xx/0      |
| 2011    | 1.096   | FRA           | CAUDRON Raoul (FRA) | S       | 0            | Andre MASCHINOT  | xx/0     | G43' G87' |

# 1.NO.OF GOALS SCORED IN FINALS UNTIL NOW

## Description:

By calculating the current trend of the number of goals scored by home and away teams we can check who have strategical advantage and who is going under more pressure.

## Specific function and requirements

As we can see total of 69 goals scored in finals out of which 1958 having the most of 7 goals and 1994 with least of 0 goals.

| Stage       | Final           |                  |
|-------------|-----------------|------------------|
| Year        | Home Team Goals | Away Teams Goals |
| 1930        | 4               | 2                |
| 1934        | 2               | 1                |
| 1938        | 4               | 2                |
| 1954        | 3               | 2                |
| 1958        | 5               | 2                |
| 1962        | 3               | 1                |
| 1966        | 4               | 2                |
| 1970        | 4               | 1                |
| 1974        | 1               | 2                |
| 1978        | 3               | 1                |
| 1982        | 3               | 1                |
| 1986        | 3               | 2                |
| 1990        | 1               | 0                |
| 1994        | 0               | 0                |
| 1998        | 0               | 3                |
| 2002        | 0               | 2                |
| 2006        | 1               | 1                |
| 2010        | 0               | 1                |
| 2014        | 2               | 0                |
| Grand Total | 43              | 26               |





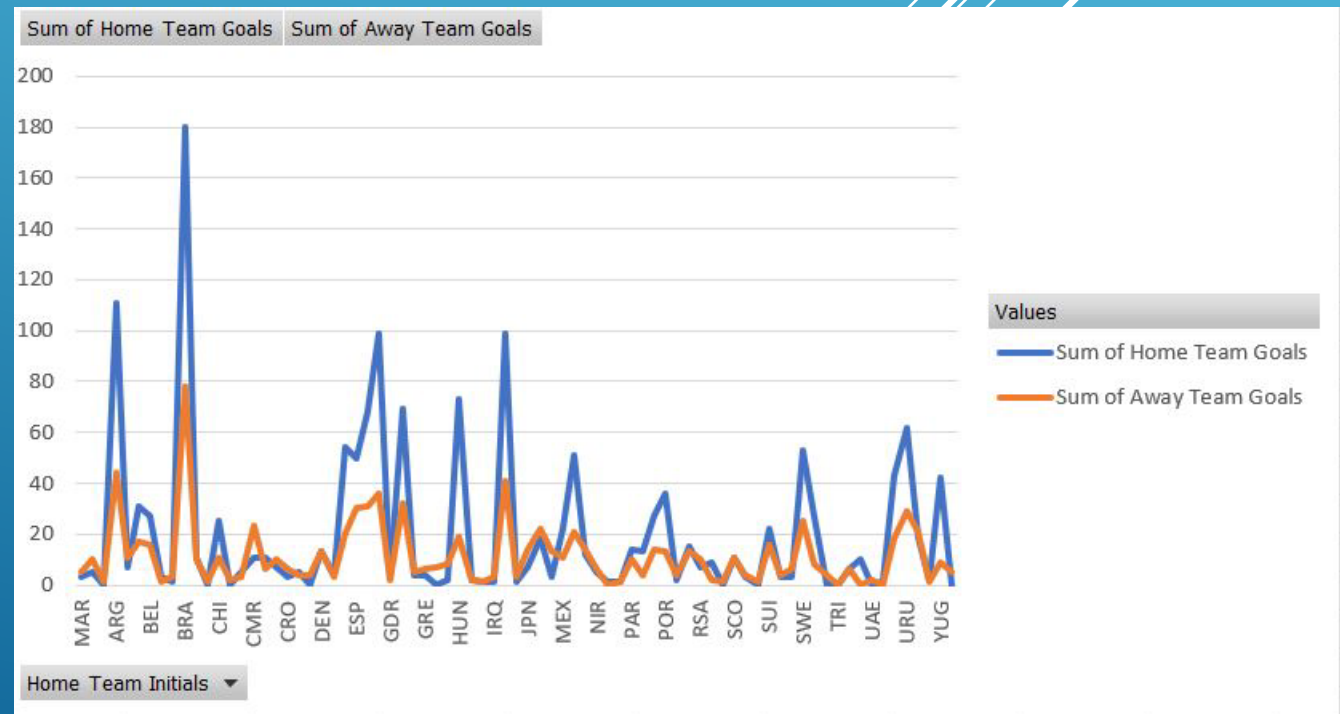
## 2.GOALS SCORED BY HOME TEAMS AND AWAY TEAMS

Describes the total goals scored by home and away teams and also top 3 teams scoing most goal difference.

### Specific function and requirements:

We have to create a pivot table. No specific functions are used. Only a few snips of the data shown

| Row La | Sum of Hc | Sum of Away Team Goals |
|--------|-----------|------------------------|
| MAR    | 3         | 5                      |
| ALG    | 5         | 10                     |
| ANG    | 0         | 1                      |
| ARG    | 111       | 44                     |
| AUS    | 7         | 11                     |
| AUT    | 31        | 17                     |
| BEL    | 27        | 16                     |
| BIH    | 3         | 1                      |
| BOL    | 1         | 3                      |
| BRA    | 180       | 78                     |
| BUL    | 11        | 10                     |
| CAN    | 0         | 1                      |
| CHI    | 25        | 11                     |
| CHN    | 0         | 2                      |
| CIV    | 5         | 3                      |
| CMR    | 11        | 23                     |
| COL    | 11        | 6                      |
| CRC    | 7         | 10                     |
| CRO    | 3         | 6                      |
| CUB    | 5         | 4                      |
| CZE    | 0         | 4                      |
| DEN    | 13        | 13                     |
| ECU    | 4         | 3                      |
| ENG    | 54        | 20                     |
| ESP    | 50        | 30                     |
| FRA    | 68        | 31                     |
| FRG    | 99        | 36                     |
| GDR    | 3         | 2                      |
| GER    | 69        | 32                     |
| GHA    | 4         | 5                      |



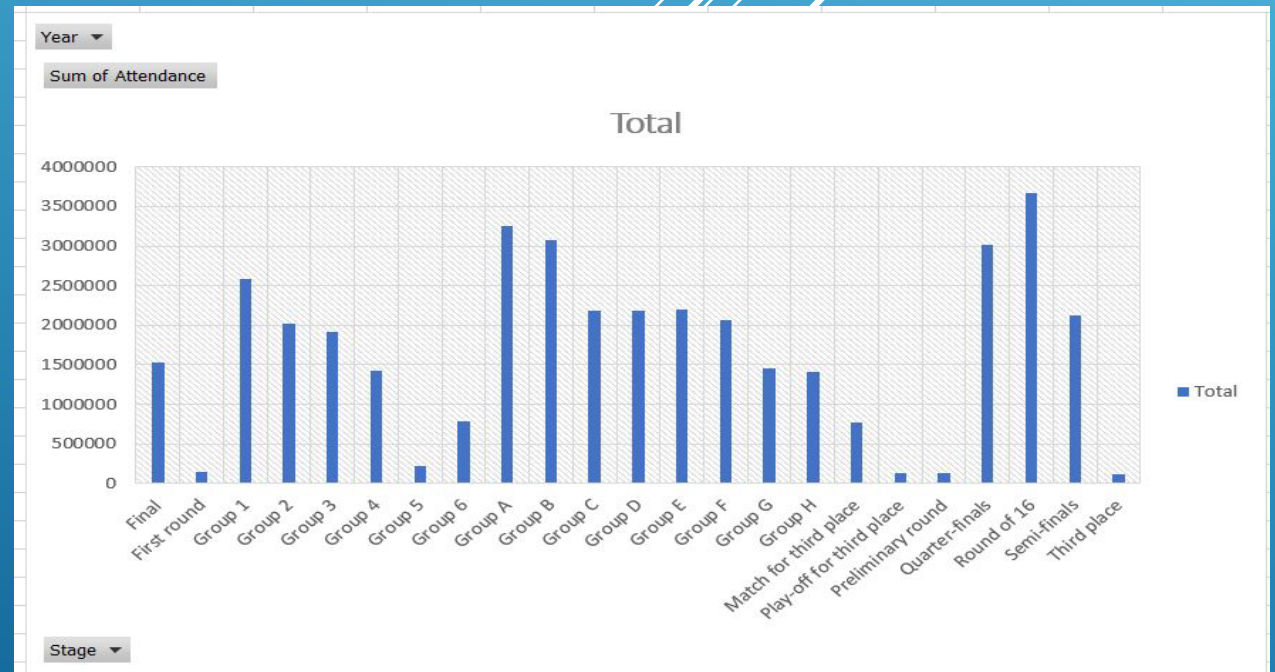
### 3.ANALYZING THE TOTAL ATTENDANCE OF CROWD IN GROUP MATCHES, SEMI-FINALS AND FINALS

Describes the total attendance based on the group A,B,C,D and semifinals and finals and determining which stadium to be chosen, approx. amount of people expected security required etc.

#### Specific function and requirements:

We have to create a pivot table. No specific functions are used. We then put the type of match and sum of sales in the columns.

| Year                     | (All)             |
|--------------------------|-------------------|
| Sections                 | Sum of Attendance |
| Final                    | 1527673           |
| First round              | 145083            |
| Group 1                  | 2583172           |
| Group 2                  | 2020264           |
| Group 3                  | 1919199           |
| Group 4                  | 1425366           |
| Group 5                  | 212124            |
| Group 6                  | 787903            |
| Group A                  | 3259281           |
| Group B                  | 3082072           |
| Group C                  | 2184717           |
| Group D                  | 2180512           |
| Group E                  | 2192444           |
| Group F                  | 2056362           |
| Group G                  | 1455995           |
| Group H                  | 1402411           |
| Match for third place    | 762718            |
| Play-off for third place | 136068            |
| Preliminary round        | 135000            |
| Quarter-finals           | 3016034           |
| Round of 16              | 3664279           |
| Semi-finals              | 2125920           |
| Third place              | 115483            |
| Grand Total              | 38390080          |



## 4.COUNTRY WINNING THE MAXIMUM WORLD CUP

### Description:

Determines the country with maximum FIFA world cup trophy.

### Specific function and requirements:

We have to create a pivot table. No specific functions are used.

| Country            | Count of Winner |
|--------------------|-----------------|
| Argentina          | 1               |
| Brazil             | 2               |
| Chile              | 1               |
| England            | 1               |
| France             | 2               |
| Germany            | 2               |
| Italy              | 2               |
| Korea/Japan        | 1               |
| Mexico             | 2               |
| South Africa       | 1               |
| Spain              | 1               |
| Sweden             | 1               |
| Switzerland        | 1               |
| Uruguay            | 1               |
| USA                | 1               |
| <b>Grand Total</b> | <b>20</b>       |

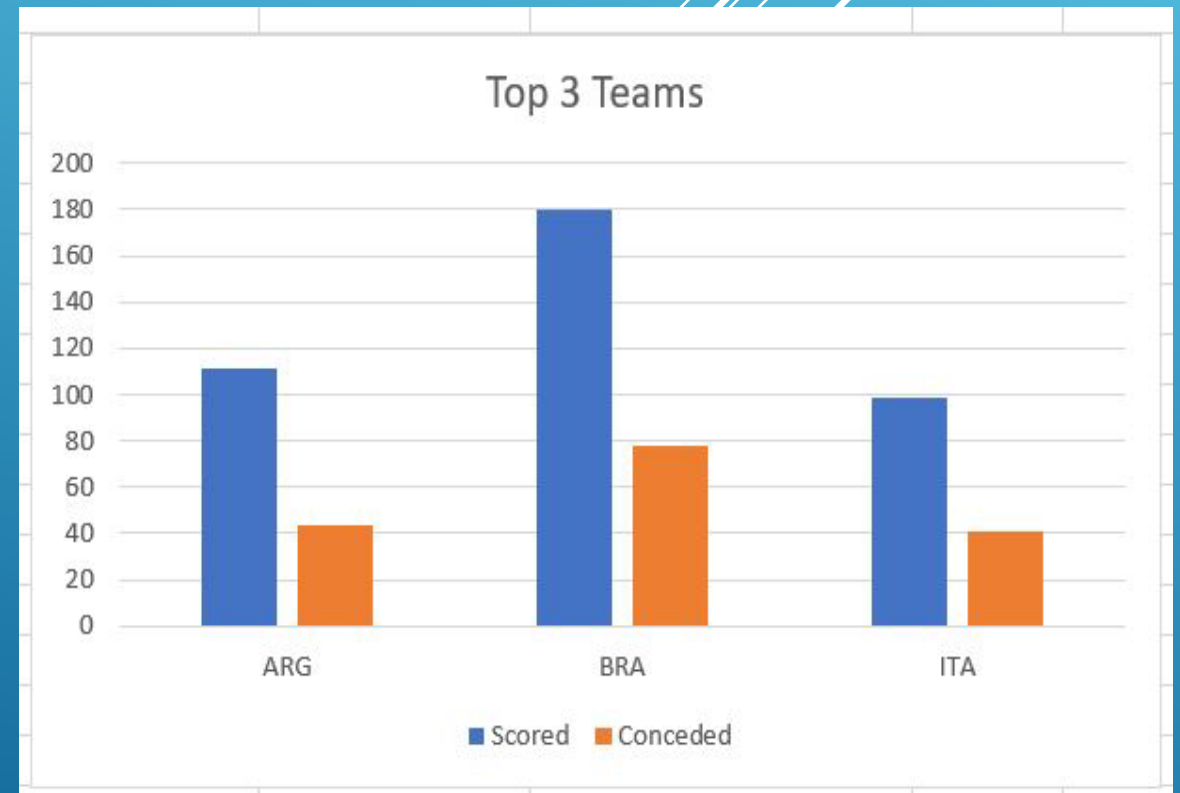
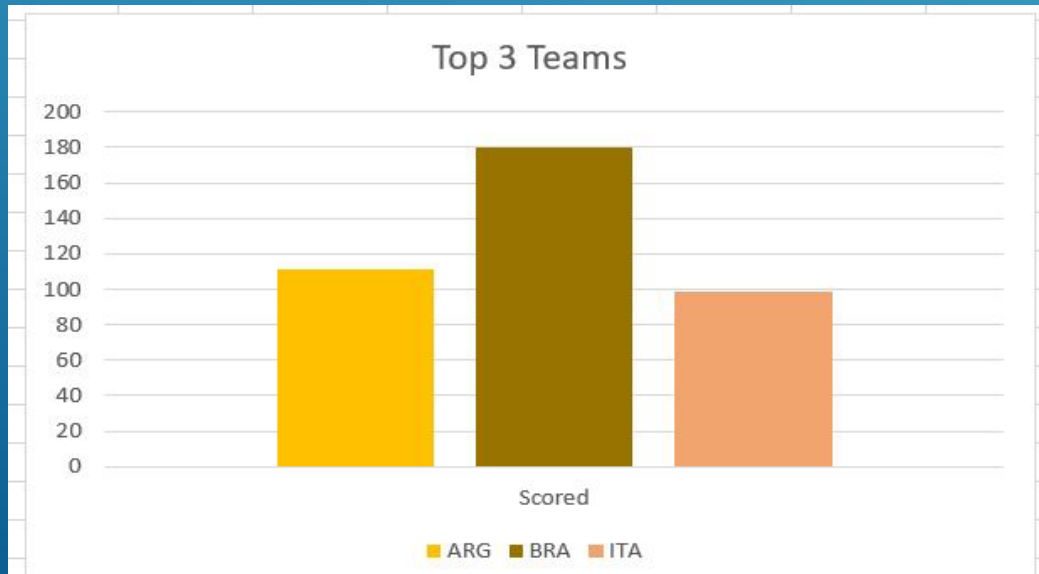


## 5.ANALYZING DIFFERENCE BETWEEN TOTAL GOALS SCORED AND TOTAL GOALS CONCEDED

### Description:

Difference between goals scored and conceded by teams.

| Row Labels | Scored | Conceded |
|------------|--------|----------|
| ARG        | 111    | 44       |
| BRA        | 180    | 78       |
| ITA        | 99     | 41       |



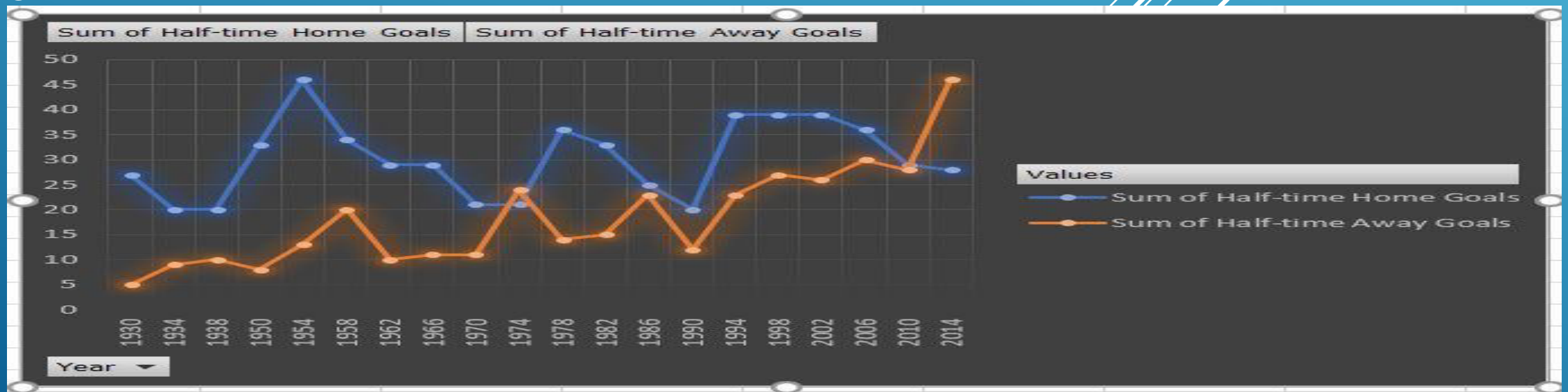


## 6. HALF TIME GOALS SCORED BY THE HOME AND AWAY TEAMS

Total number of goals scored by home and away teams year by year from the year 1930 to 2014 to depict the mental confidence and usual trend of goals scored. From the trend given below we can see home team scores 604 goals in foist half and away team scores 365 goals. There is a massive goal difference leading to home team advantage.

### Specific function and requirements

We have to create a pivot table to determine the difference in goals and then visualize it on graph.



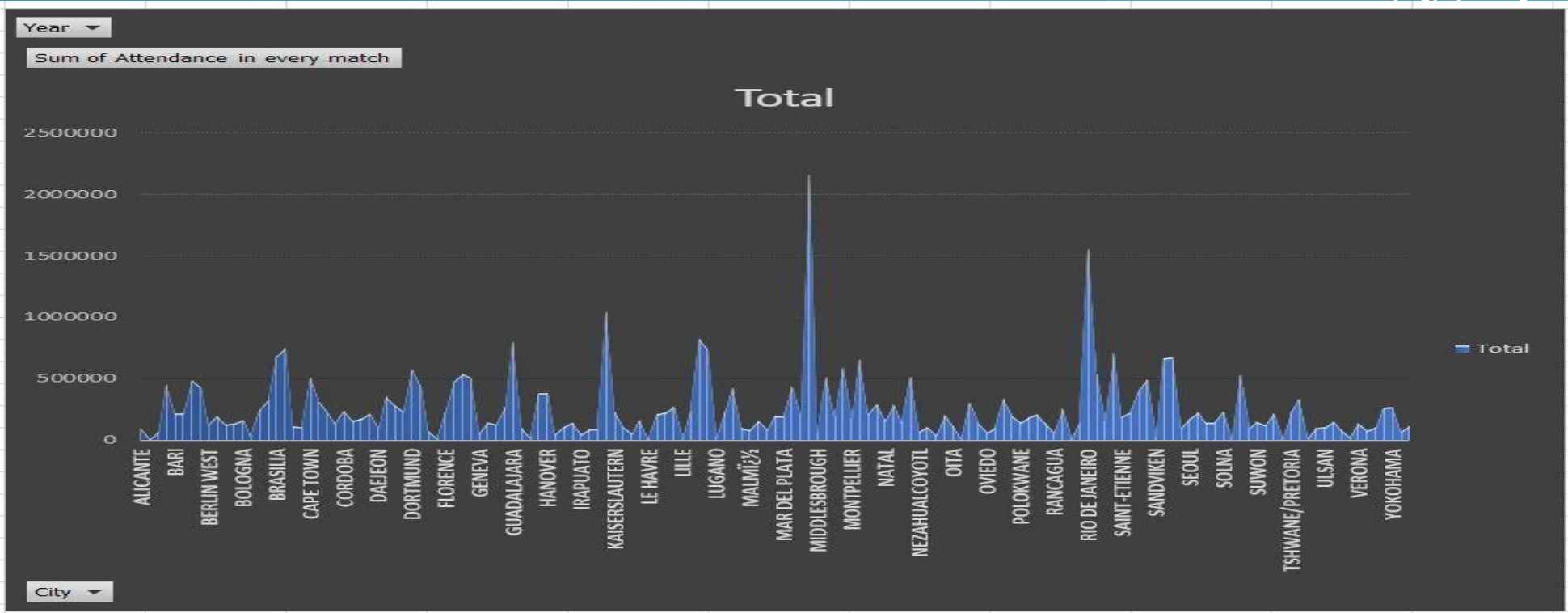
# 7.OVERALL ATTENDANCE FOR A PARTICULAR CITY UNTIL NOW

## Description:

Determine the sum of attendance of all the people when they are home team.

## Visualization:

We visualize the above results with the help of area chart created using area chart.



## 8.NO. OF PEOPLE CAME TO VIEW MATCH FOR PARTICULAR TEAM

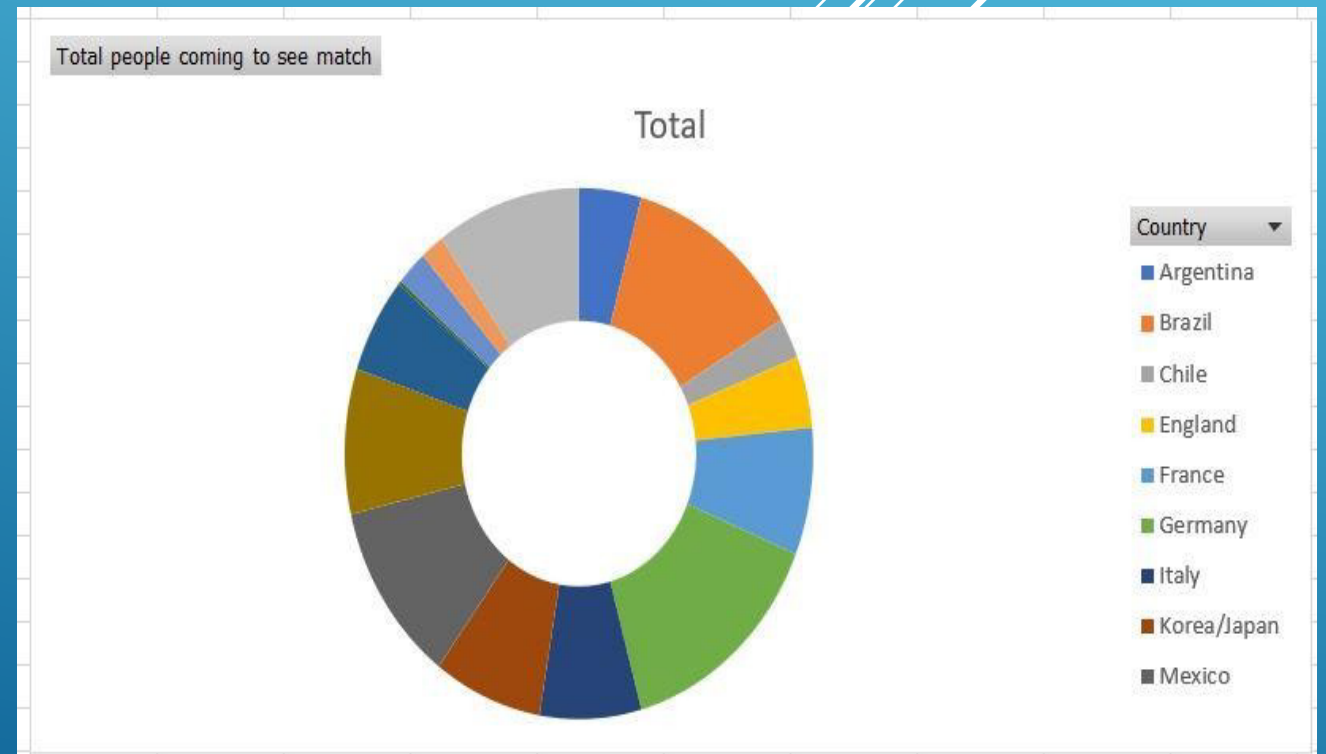
### Description:

By comparing the attendance of all cities we get top 5 cities with highest audience.

### Specific function and requirements:

We get cities with highest fans.here we potray top 5 countries with highest attendance and snips of data.

| Country            | Total people coming to see match |
|--------------------|----------------------------------|
| Argentina          | 1545791                          |
| Brazil             | 4432056                          |
| Chile              | 893172                           |
| England            | 1563135                          |
| France             | 2788857                          |
| Germany            | 5225192                          |
| Italy              | 2516578                          |
| Korea/Japan        | 2705197                          |
| Mexico             | 3998006                          |
| South Africa       | 3178856                          |
| Spain              | 2109723                          |
| Sweden             | 81981                            |
| Switzerland        | 768607                           |
| Uruguay            | 590549                           |
| USA                | 3587538                          |
| <b>Grand Total</b> | <b>35985238</b>                  |



## 9.NUMBER OF PEOPLE CAME TO VIEW MATCH FOR A PARTICULAR TEAM

Most people came to see match for brazil then argentina,Italy England and so on..

