

FIFA WORLD CUP RUSSIA 2018



Who will be the Next Champion?

Building a Relational Database for FIFA World Cup in SQL

Rusia	17:00	A. Saudi	14/6	5
Egipto	14:00	Uruguay	15/6	cuatro
Rusia	20:00	Egipto	19/6	5
Uruguay	17:00	A. Saudi	20/6	cuatro
A. Saudi	16:00	Egipto	25/6	cuatro
Uruguay	16:00	Rusia	25/6	cuatro

Marruecos	17:00	Irán	15/6	cuatro
Portugal	20:00	España	15/6	5
Irán	20:00	España	20/6	5
Portugal	14:00	Marruecos	20/6	cuatro
Irán	20:00	Portugal	25/6	cuatro
España	20:00	Marruecos	25/6	5

Francia	16:00	Perú	21/6	cuatro
Australia	16:00	Perú	26/6	cuatro
Dinamarca	16:00	Francia	26/6	cuatro

Argentina	16:00	Islandia	16/6	cuatro
Croacia	21:00	Nigeria	16/6	5
Argentina	20:00	Croacia	21/6	5
Nigeria	17:00	Islandia	22/6	cuatro
Islandia	20:00	Croacia	26/6	cuatro
Nigeria	20:00	Argentina	26/6	5

A1 5

B2 30:00
30/6

C1 cuatro

E1 5
cuatro

F2 18:00
2/7

H2 20:00
2/7

G49 cuatro

G50 16:00
6/7

G58 20:00
10/7

G53 5

G61 5

G62 17:00
15/7

G59 16:00
7/7

G60 16:00
11/7

G51 5

G52 20:00
7/7

B1 cuatro

A2 16:00
1/7

D1 5

F1 cuatro

E2 16:00
3/7

H1 5

G2 20:00
1/7

Brasil	20:00	Suiza	17/6	5
Costa Rica	14:00	Serbia	17/6	cuatro
Brasil	14:00	Costa Rica	22/6	cuatro
Serbia	20:00	Suiza	22/6	5
Serbia	20:00	Brasil	27/6	5
Suiza	20:00	Costa Rica	27/6	cuatro

Alemania	17:00	México	17/6	cuatro
Suecia	14:00	Corea del Sur	18/6	cuatro
Alemania	20:00	Suecia	23/6	5
Corea del Sur	17:00	México	23/6	cuatro
Corea del Sur	16:00	Alemania	27/6	cuatro
México	16:00	Suecia	27/6	cuatro

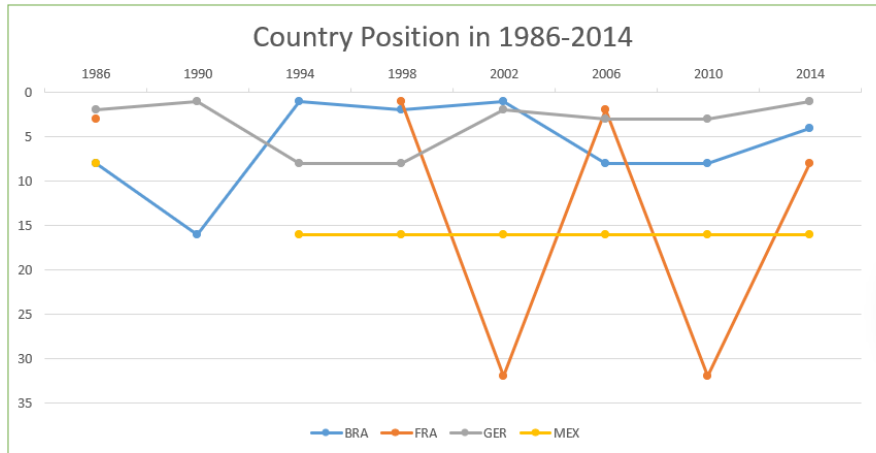
Inglaterra	16:00	Panamá	18/6	cuatro
Inglaterra	16:00	Inglaterra	18/6	5
Túnez	16:00	Túnez	23/6	cuatro
Inglaterra	14:00	Panamá	24/6	cuatro
Inglaterra	20:00	Bélgica	26/6	5
Panamá	20:00	Túnez	26/6	cuatro

Colombia	14:00	Japón	19/6	cuatro
Polonia	17:00	Senegal	19/6	cuatro
Japón	17:00	Senegal	24/6	cuatro
Polonia	20:00	Colombia	24/6	5
Japón	16:00	Polonia	28/6	cuatro
Senegal	16:00	Colombia	28/6	cuatro



FIFA WORLD CUP DASHBOARD

Country Position in 1986-2014



Champion Countries

8

Total Qualified Countries

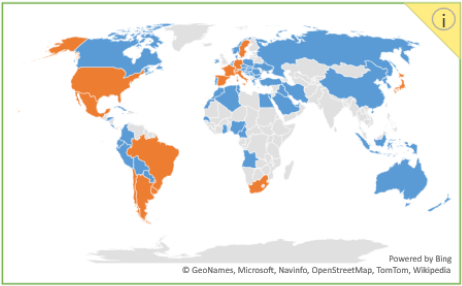
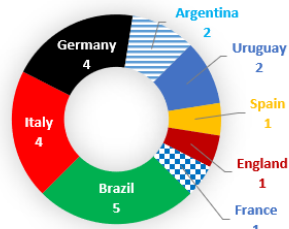
77

Total Host Countries

17



FIFA WORLD CUP
RUSSIA 2018



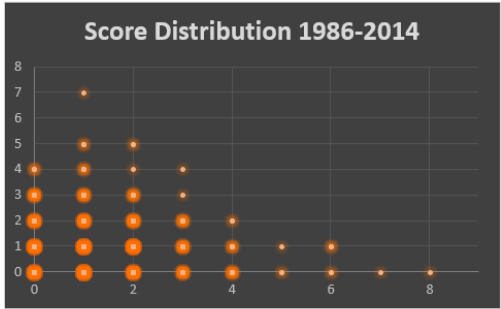
Total World-Cups

20

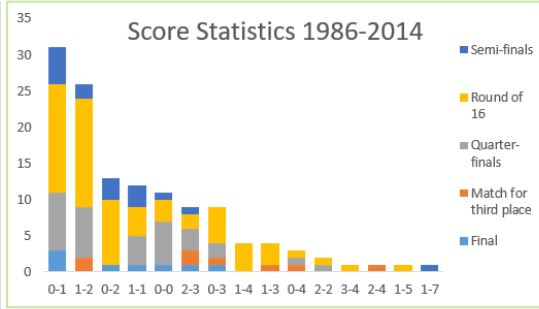
Average Host Position

9

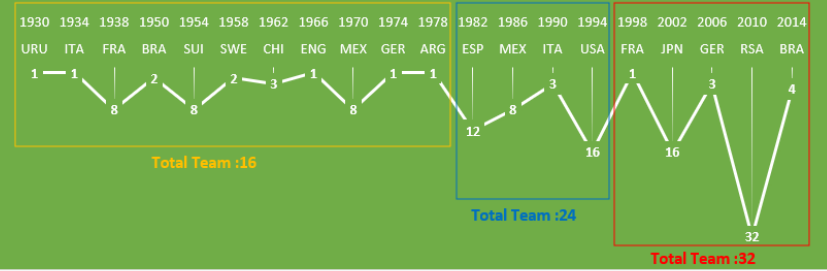
Score Distribution 1986-2014



Score Statistics 1986-2014



HOST COUNTRY RESULT IN HISTORY





Content

1. Problem Definition
2. Data Collection
3. E-R Diagram & Schema
4. Data Preparation
5. Data Analysis
6. Data Visualization & Insights
7. Q & A





Problem Definition

A Real Scenario:

Earlier in June 2018, since FIFA World Cup 2018 was getting closer, most of my friends decided to watch the games together or even make some bets (or buying Singapore Pools) on the result. I was also interested in it and would like to participate.

But the Problem was that I had only very basic common sense about World-Cup and totally no idea about the performance of each country or how was the score like in usual. Which made me unable to catch up the chat with my friends. (or lose the bet)

Luckily, the historical World-Cup records are well kept and easy to assess. Analysis could be carried out based on these previous records in order to get the insights which might be useful to me.

So, My Solution was to look for the World-Cup's track record and try to figure out at least the following insights:

1. Quick Facts about World Cup;
2. What are the Top Teams;
3. What are the Dark Horses;
4. What are the Common Scores;
- ...





Data Collection

Sources:



- FIFA World Cup-All the results from World Cups : <https://www.kaggle.com/abecklas/fifa-world-cup>

Dataset



665

FIFA World Cup

All the results from World Cups



Andre Becklas • updated 3 years ago (Version 5)

[Data](#) [Tasks](#) [Notebooks \(77\)](#) [Discussion \(11\)](#) [Activity](#) [Metadata](#)

Download (2 MB)

New Notebook

Usability 8.8

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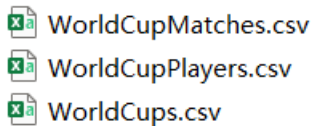
Tags sports, football





FIFA World Cup-All the results from World Cups

Files:



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WorldCups.csv

<u>Year</u>
Country
Winner
Runners-Up
Third
Fourth
GoalsScored
QualifiedTeams
MatchesPlayed
Attendance

Attribute:20

Row:852

WorldCupMatches.csv

<u>MatchID</u>
Year
Datetime
Stage
Stadium
City
Home Team Name
Home Team Goals
Away Team Goals
Away Team Name
Win conditions
Attendance
Half-time Home Goals
Half-time Away Goals
Referee
Assistant 1
Assistant 2
RoundID
Home Team Initials
Away Team Initials

Attribute:9

Row:37,784

WorldCupPlayers.csv

<u>MatchID</u>
<u>Player Name</u>
RoundID
Team Initials
Coach Name
Line-up
Shirt Number
Position
Event

Merits:

Intact dataset providing [all the information in need](#).

Demerits:

1. Tables are too bulky to handle;
2. Repeating long values occupying extra storage space;(e.g. All kinds of Name);
3. Foreign alphabets displaying as '???';
4. Duplicate records;





WorldCups.csv

Attribute:10

Row:20

Year	Country	Winner	Runners-Up	Third	Fourth	GoalsScored	QualifiedTeams	MatchesPlayed	Attendance
1930	Uruguay	Uruguay	Argentina	USA	Yugoslavia	70	13	18	590.549
1934	Italy	Italy	Czechoslovakia	Germany	Austria	70	16	17	363
1938	France	Italy	Hungary	Brazil	Sweden	84	15	18	375.7
1950	Brazil	Uruguay	Brazil	Sweden	Spain	88	13	22	1.045.246
1954	Switzerland	Germany	Hungary	Austria	Uruguay	140	16	26	768.607
1958	Sweden	Brazil	Sweden	France	Germany FR	126	16	35	819.81
1962	Chile	Brazil	Czechoslovakia	Chile	Yugoslavia	89	16	32	893.172
1966	England	England	Germany FR	Portugal	Soviet Union	89	16	32	1.563.135
1970	Mexico	Brazil	Italy	Germany FR	Uruguay	95	16	32	1.603.975
1974	Germany	Germany	Netherlands	Poland	Brazil	97	16	38	1.865.753
1978	Argentina	Argentina	Netherlands	Brazil	Italy	102	16	38	1.545.791
1982	Spain	Italy	Germany FR	Poland	France	146	24	52	2.109.723
1986	Mexico	Argentina	Germany FR	France	Belgium	132	24	52	2.394.031
1990	Italy	Germany	Argentina	Italy	England	115	24	52	2.516.215
1994	USA	Brazil	Italy	Sweden	Bulgaria	141	24	52	3.587.538
1998	France	France	Brazil	Croatia	Netherlands	171	32	64	2.785.100
2002	Korea/Jap	Brazil	Germany	Turkey	Korea Republic	161	32	64	2.705.197
2006	Germany	Italy	France	Germany	Portugal	147	32	64	3.359.439
2010	South Afri	Spain	Netherlands	Germany	Uruguay	145	32	64	3.178.856
2014	Brazil	Germany	Argentina	Netherlands	Brazil	171	32	64	3.386.810





WorldCupMatches.csv

Attribute:20

Row:852

Year	Datetime	Stage	Stadium	City	Home Team	Home Team Goals	Away Team Goals	Away Team	Win conditions	Attendance	Half-time	Half-time	Referee	Assistant 1	Assistant 2	RoundID	MatchID	Home	Away Team
1930	13 Jul 1930 - 15:00	Group 1	Poitos	Montevideo	France	4	1	Mexico		4444	3	0	LOMBARDI Domingo (URU)	CRISTOPHE Henry (BEL)	REGO Gilberto (BRA)	201	1096	FRA	MEX
1930	13 Jul 1930 - 15:00	Group 4	Parque Central	Montevideo	USA	3	0	Belgium		18346	2	0	MACIAS Jose (ARG)	MATEUCCI Francisco (URU)	WARNKEN Alberto (CHI)	201	1090	USA	BEL
1930	14 Jul 1930 - 12:45	Group 2	Parque Central	Montevideo	Yugoslavia	2	1	Brazil		24059	2	0	TEJADA Anibal (URU)	VALLARINO Ricardo (URU)	BALWAY Thomas (FRA)	201	1093	YUG	BRA
1930	14 Jul 1930 - 14:50	Group 3	Poitos	Montevideo	Romania	1	1	Peru		2549	1	0	WARNKEN Alberto (CHI)	LANGENUS Jean (BEL)	MATEUCCI Francisco (URU)	201	1098	ROU	PER
1930	15 Jul 1930 - 16:00	Group 1	Parque Central	Montevideo	Argentina	1	0	France		23409	0	0	REGO Gilberto (BRA)	SAUCEDO Ulises (BOL)	RADULESCU Constantin (ROU)	201	1085	ARG	FRA
1930	16 Jul 1930 - 14:45	Group 1	Parque Central	Montevideo	Chile	3	0	Mexico		9249	1	0	CRISTOPHE Henry (BEL)	APHESTEGUY Martin (URU)	LANGENUS Jean (BEL)	201	1095	CHI	MEX
1930	17 Jul 1930 - 12:45	Group 2	Parque Central	Montevideo	Yugoslavia	4	0	Bolivia		18306	0	0	MATEUCCI Francisco (URU)	LOMBARDI Domingo (URU)	WARNKEN Alberto (CHI)	201	1092	YUG	BOL
1930	17 Jul 1930 - 14:45	Group 4	Parque Central	Montevideo	USA	3	0	Paraguay		18306	2	0	MACIAS Jose (ARG)	APHESTEGUY Martin (URU)	TEJADA Anibal (URU)	201	1097	USA	PAR
1930	18 Jul 1930 - 14:30	Group 3	Estadio Centenario	Montevideo	Uruguay	1	0	Peru		57735	0	0	LANGENUS Jean (BEL)	BALWAY Thomas (FRA)	CRISTOPHE Henry (BEL)	201	1099	URU	PER
1930	19 Jul 1930 - 12:50	Group 1	Estadio Centenario	Montevideo	Chile	1	0	France		2000	0	0	TEJADA Anibal (URU)	LOMBARDI Domingo (URU)	REGO Gilberto (BRA)	201	1094	CHI	FRA
1930	19 Jul 1930 - 15:00	Group 1	Estadio Centenario	Montevideo	Argentina	6	3	Mexico		42100	3	1	SAUCEDO Ulises (BOL)	ALONSO Gualberto (URU)	RADULESCU Constantin (ROU)	201	1086	ARG	MEX
1930	20 Jul 1930 - 13:00	Group 2	Estadio Centenario	Montevideo	Brazil	4	0	Bolivia		25466	1	0	BALWAY Thomas (FRA)	MATEUCCI Francisco (URU)	VALLEJO Gaspar (MEX)	201	1091	BRA	BOL
1930	20 Jul 1930 - 15:00	Group 4	Estadio Centenario	Montevideo	Paraguay	1	0	Belgium		12000	1	0	VALLARINO Ricardo (URU)	MACIAS Jose (ARG)	LOMBARDI Domingo (URU)	201	1089	PAR	BEL
1930	21 Jul 1930 - 14:50	Group 3	Estadio Centenario	Montevideo	Uruguay	4	0	Romania		70022	4	0	REGO Gilberto (BRA)	WARNKEN Alberto (CHI)	SAUCEDO Ulises (BOL)	201	1100	URU	ROU
1930	22 Jul 1930 - 14:45	Group 1	Estadio Centenario	Montevideo	Argentina	3	1	Chile		41459	2	1	LANGENUS Jean (BEL)	CRISTOPHE Henry (BEL)	SAUCEDO Ulises (BOL)	201	1084	ARG	CHI
1930	26 Jul 1930 - 14:45	Semi-final	Estadio Centenario	Montevideo	Argentina	6	1	USA		72886	1	0	LANGENUS Jean (BEL)	VALLEJO Gaspar (MEX)	WARNKEN Alberto (CHI)	202	1088	ARG	USA
1930	27 Jul 1930 - 14:45	Semi-final	Estadio Centenario	Montevideo	Uruguay	6	1	Yugoslavia		79867	3	1	REGO Gilberto (BRA)	SAUCEDO Ulises (BOL)	BALWAY Thomas (FRA)	202	1101	URU	YUG
1930	30 Jul 1930 - 14:15	Final	Estadio Centenario	Montevideo	Uruguay	4	2	Argentina		68346	1	2	LANGENUS Jean (BEL)	SAUCEDO Ulises (BOL)	CRISTOPHE Henry (BEL)	405	1087	URU	ARG
1934	27 May 1934 - 16:30	Prelimina	Stadio Benito Mussolini	Turin	Austria	3	2	France	Austria win after	16000	0	0	VAN MOORSEL Johannes	CAIRONI Camillo (ITA)	BAERT Louis (BEL)	204	1104	AUT	FRA
1934	27 May 1934 - 16:30	Prelimina	Giorgio Ascarelli	Naples	Hungary	4	2	Egypt		9000	2	2	BARLASSINA Rinaldo (ITA)	DATTILO Generoso (ITA)	SASSI Ottello (ITA)	204	1119	HUN	EGY
1934	27 May 1934 - 16:30	Prelimina	San Siro	Milan	Switzerland	2	2	Netherlands		33000	2	1	EKLUND Ivan (SWE)	BERANEK Alois (AUT)	BONIVENTO Ferruccio (ITA)	204	1133	SUI	NED
1934	27 May 1934 - 16:30	Prelimina	Littorale	Bologna	Sweden	2	2	Argentina		14000	1	1	BRAUN Eugen (AUT)	CARRARO Albino (ITA)	TURBIANI Giuseppe (ITA)	204	1102	SWE	ARG
1934	27 May 1934 - 16:30	Prelimina	Giovanni Berta	Florence	Germany	5	2	Belgium		8000	1	2	MATTEA Francesco (ITA)	MELANDRI Emengildo (FRA)	BAERT Jacques (FRA)	204	1108	GER	BEL
1934	27 May 1934 - 16:30	Prelimina	Luigi Ferraris	Genoa	Spain	3	1	Brazil		21000	3	0	BIRLEM Alfred (GER)	CARMINATI Ettore (ITA)	IVANCSCIS Mihaly (HUN)	204	1111	ESP	BRA
1934	27 May 1934 - 16:30	Prelimina	Nazionale PNF	Rome	Italy	7	1	USA		25000	3	0	MERCET Rene (SUI)	ESCARTIN Pedro (ESP)	ZENISEK Bohumil (TCH)	204	1135	ITA	USA
1934	27 May 1934 - 16:30	Prelimina	Littorio	Trieste	Czechoslovakia	2	1	Romania		9000	0	1	LANGENUS Jean (BEL)	SCARPI Giuseppe (ITA)	SCORZONI Raffaele (ITA)	204	1141	TCH	ROU
1934	31 May 1934 - 16:30	Quarter-final	Stadio Benito Mussolini	Turin	Czechoslovakia	3	2	Switzerland		12000	1	1	BERANEK Alois (AUT)	MOHAMED Youssuf (EGY)	BAERT Jacques (FRA)	418	1143	TCH	SUI
1934	31 May 1934 - 16:30	Quarter-final	San Siro	Milan	Germany	2	1	Sweden		3000	0	0	BARLASSINA Rinaldo (ITA)	MERCET Rene (SUI)	VAN MOORSEL Johannes (NE)	418	1129	GER	SWE
1934	31 May 1934 - 16:30	Quarter-final	Giovanni Berta	Florence	Italy	1	1	Spain		35000	0	0	BAERT Louis (BEL)	ZENISEK Bohumil (TCH)	IVANCSCIS Mihaly (HUN)	418	1122	ITA	ESP
1934	31 May 1934 - 16:30	Quarter-final	Littorale	Bologna	Austria	2	1	Hungary		23000	1	0	MATTEA Francesco (ITA)	ESCARTIN Pedro (ESP)	BIRLEM Alfred (GER)	418	1106	AUT	HUN
1934	01 Jun 1934 - 16:30	Quarter-final	Giovanni Berta	Florence	Italy	1	0	Spain		43000	1	0	MERCET Rene (SUI)	IVANCSCIS Mihaly (HUN)	ZENISEK Bohumil (TCH)	418	1123	ITA	ESP
1934	03 Jun 1934 - 16:30	Semi-final	San Siro	Milan	Italy	1	0	Austria		35000	1	0	EKLUND Ivan (SWE)	BAERT Louis (BEL)	ZENISEK Bohumil (TCH)	3492	1107	ITA	AUT
1934	03 Jun 1934 - 16:30	Semi-final	Nazionale PNF	Rome	Czechoslovakia	3	1	Germany		15000	1	0	BARLASSINA Rinaldo (ITA)	BERANEK Alois (AUT)	ESCARTIN Pedro (ESP)	3492	1130	TCH	GER
1934	07 Jun 1934 - 18:00	Match for Giorgio Ascarelli	Naples	Germany	3	2	Austria		7000	3	1	CARRARO Albino (ITA)	CAIRONI Camillo (ITA)	ESCARTIN Pedro (ESP)	3491	1105	GER	AUT	
1934	10 Jun 1934 - 17:30	Final	Nazionale PNF	Rome	Italy	2	1	Czechoslovakia	Italy win after ex	55000	0	0	EKLUND Ivan (SWE)	BAERT Louis (BEL)	IVANCSCIS Mihaly (HUN)	3490	1134	ITA	TCH
1938	04 Jun 1938 - 17:00	First round	Parc des Princes	Paris	Switzerland	1	1	Germany		27152	0	0	LANGENUS Jean (BEL)	MARENCO Paul (FRA)	VAN MOORSEL Johannes (NE)	206	1165	SUI	GER
1938	05 Jun 1938 - 17:00	First round	Velodrome Municipal	Reims	Hungary	6	0	Dutch East Indies		9000	4	0	CONRIE Roger (FRA)	DE LA SALLE Charles (FRA)	WEINGARTNER Karl (AUT)	206	1173	HUN	IND
1938	05 Jun 1938 - 17:00	First round	Stade Olympique	Colombes	France	3	1	Belgium		30454	2	1	WUETHRICH Hans (SUI)	KRIST Gustav (TCH)	BIRLEM Alfred (GER)	206	1146	FRA	BEL
1938	05 Jun 1938 - 17:00	First round	Stade Municipal	Toulouse	Cuba	3	3	Romania		7000	0	0	SCARPI Giuseppe (ITA)	VALPREDE Ferdinand (FRA)	MERKX Jean (FRA)	206	1156	CUB	ROU
1938	05 Jun 1938 - 17:00	First round	Stade Vélodrome	Marseille	Italy	2	1	Norway	Italy win after ex	19000	0	0	BERANEK Alois (AUT)	BOUTOURE D. (FRA)	TREHOU D. (FRA)	206	1179	ITA	NOR
1938	05 Jun 1938 - 17:30	First round	Stade de la Meinau	Strasbourg	Brazil	6	5	Poland	Brazil win after ex	13452	0	0	EKLUND Ivan (SWE)	POISSANT Louis (FRA)	KISSENBERGER Ernest (FRA)	206	1150	BRA	POL
1938	05 Jun 1938 - 18:30	First round	Caveau Vert	Le Havre	Czechoslovakia	3	0	Netherlands	Czechoslovakia win	11000	0	0	LECLERCQ Lucien (FRA)	OLIVE D. (FRA)	SDEZ Victor (FRA)	206	1172	TCH	NED
1938	09 Jun 1938 - 18:00	First round	Stade Municipal	Toulouse	Cuba	2	1	Romania		8000	0	1	BIRLEM Alfred (GER)	CAPDEVILLE Pierre (FRA)	MARENCO Paul (FRA)	206	1157	CUB	ROU





WorldCupPlayers.csv

Attribute:9

Row:37,784

RoundID	MatchID	Team Initials	Coach Name	Line-up	Shirt Number	Player Name	Position	Event
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Alex THEPOT	GK	
201	1096	MEX	LUQUE Juan (MEX)	S	0	Oscar BONFIGLIO	GK	
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Marcel LANGILLER		G40'
201	1096	MEX	LUQUE Juan (MEX)	S	0	Juan CARRENO		G70'
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Ernest LIBERATI		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Rafael GARZA	C	
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Andre MASCHINOT		G43' G87'
201	1096	MEX	LUQUE Juan (MEX)	S	0	Hilario LOPEZ		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Etienne MATTLER		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Dionisio MEJIA		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Marcel PINEL		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Felipe ROSAS		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Alex VILLAPLANE	C	
201	1096	MEX	LUQUE Juan (MEX)	S	0	Manuel ROSAS		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Lucien LAURENT		G19'
201	1096	MEX	LUQUE Juan (MEX)	S	0	Jose RUIZ		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Marcel CAPELLE		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Alfredo SANCHEZ		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Augustin CHANTREL		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Efrain AMEZCUA		
201	1096	FRA	CAUDRON Raoul (FRA)	S	0	Edmond DELFOUR		
201	1096	MEX	LUQUE Juan (MEX)	S	0	Luis PEREZ		
201	1096	FRA	CAUDRON Raoul (FRA)	N	0	Celestin DELMER		
201	1096	MEX	LUQUE Juan (MEX)	N	0	Isidoro SOTA		
201	1096	FRA	CAUDRON Raoul (FRA)	N	0	Andre TASSIN		
201	1096	MEX	LUQUE Juan (MEX)	N	0	Jesus CASTRO		
201	1096	FRA	CAUDRON Raoul (FRA)	N	0	Nouma ANDOIRE		
201	1096	MEX	LUQUE Juan (MEX)	N	0	Felipe OLIVARES		
201	1096	FRA	CAUDRON Raoul (FRA)	N	0	Jean LAURENT		



Entity

1. Country
2. World Cup
3. Match Info
4. Match Score
5. Referee
6. Stadium
7. Players each match
8. Coach

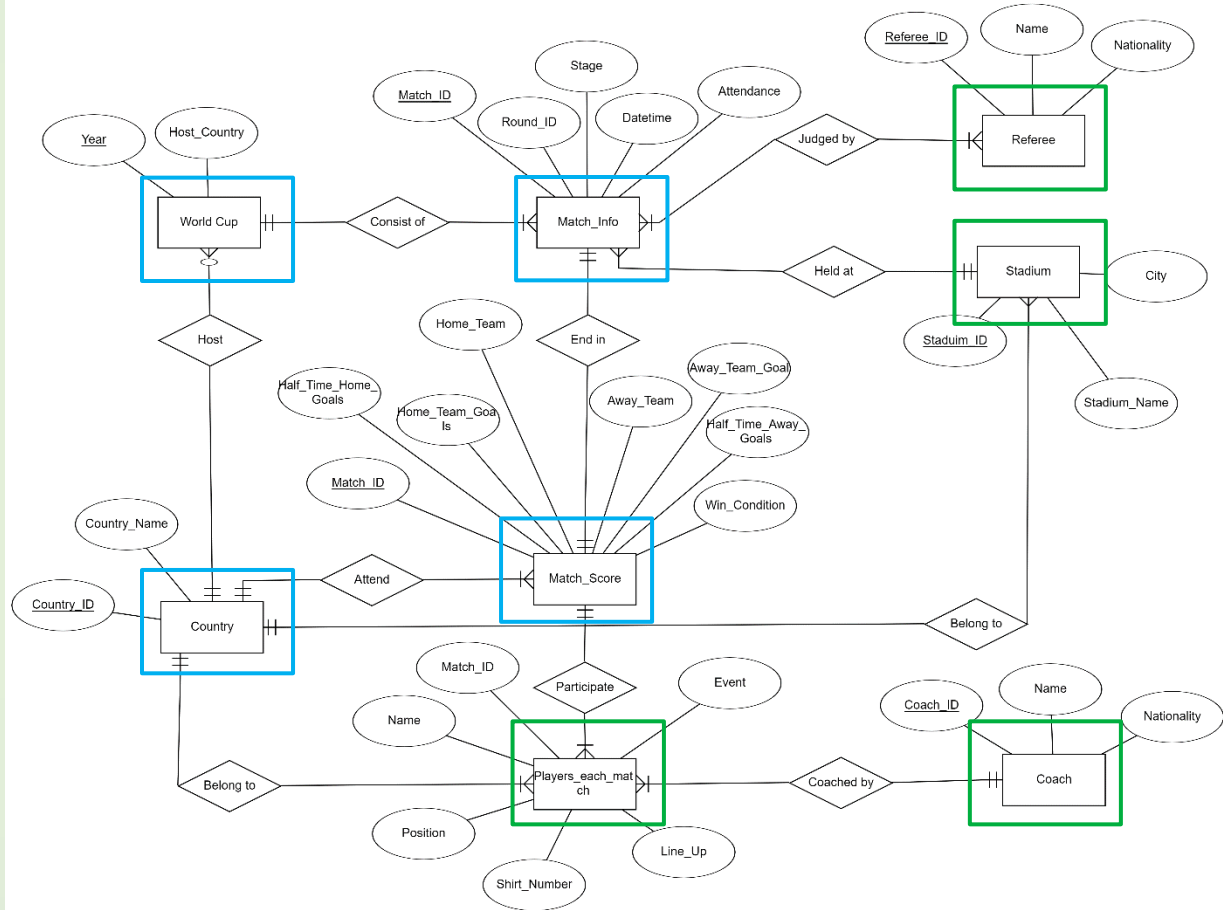
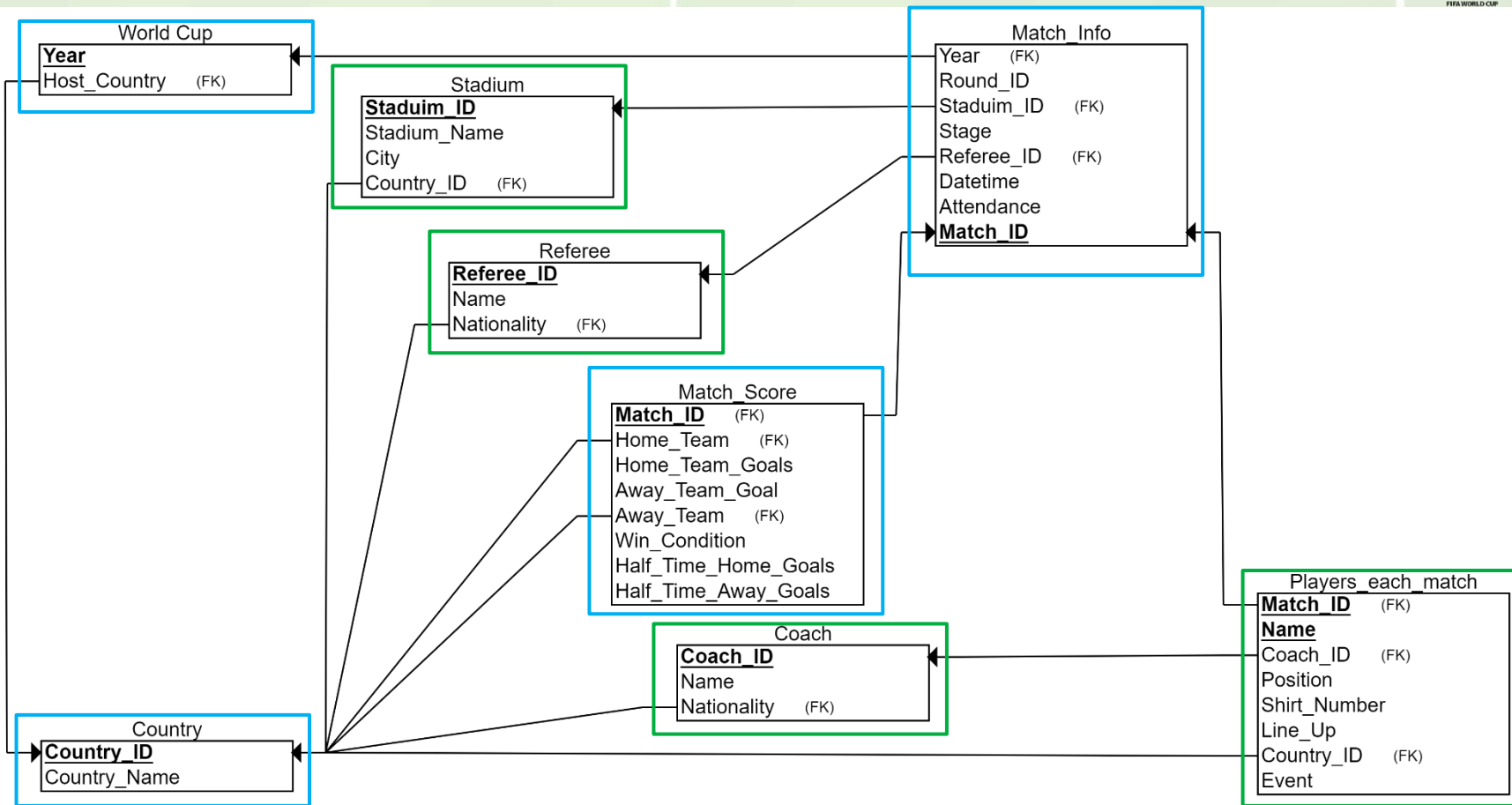




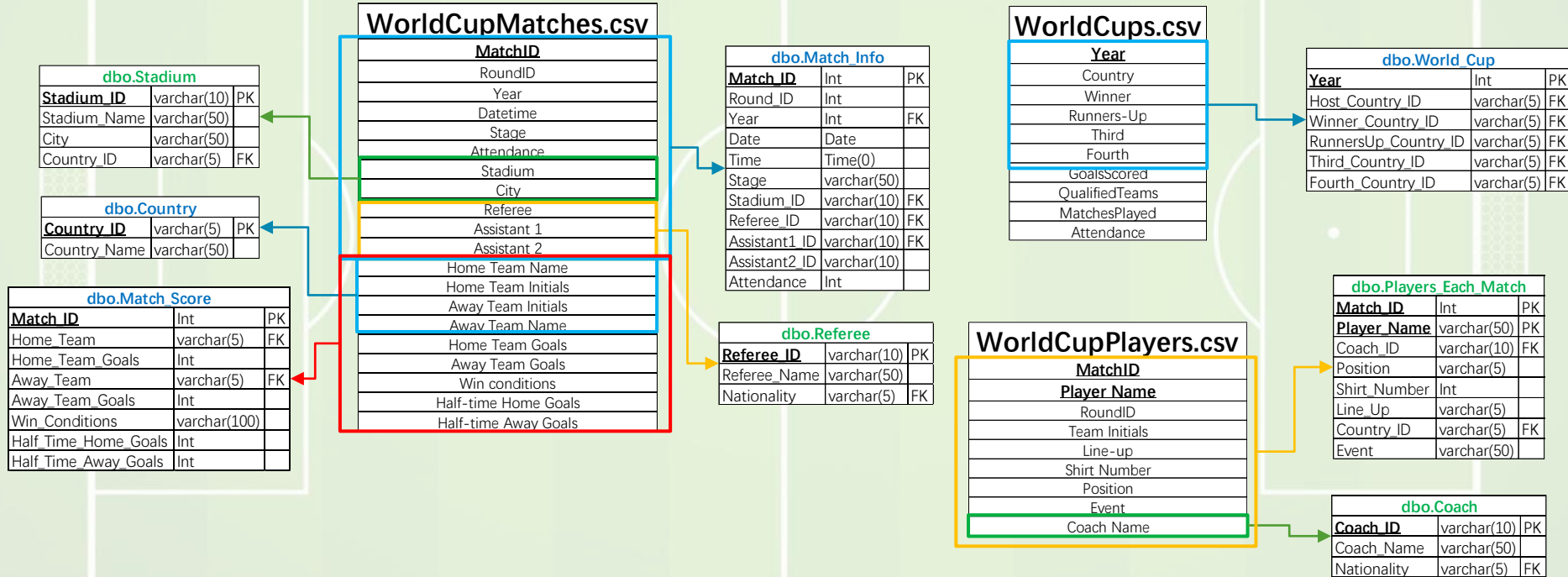
Table Creating Sequence

1. Country
2. World Cup
3. Stadium
4. Referee
5. Coach
6. Match Info
7. Match Score
8. Players each match





Creating Tables Based on Schema





Creating Tables Based on Schema in SQL

```
CREATE TABLE Match_Info
(
    [Year] INT NOT NULL,
    Round_ID INT NOT NULL,
    Match_ID INT NOT NULL PRIMARY KEY,
    [Date] DATE NOT NULL,
    [Time] Datetime NOT NULL,
    Stage VARCHAR(50) NOT NULL,
    Stadium_ID VARCHAR(10) NOT NULL,
    Referee_ID VARCHAR(10) NOT NULL,
    Assistant1_ID VARCHAR(10) NOT NULL,
    Assistant2_ID VARCHAR(10) NOT NULL,
    Attendance INT NOT NULL,
    FOREIGN KEY ([Year]) REFERENCES World_Cup(Year),
    FOREIGN KEY (Stadium_ID) REFERENCES Stadium(Stadium_ID),
    FOREIGN KEY (Referee_ID) REFERENCES Referee(Referee_ID),
    FOREIGN KEY (Assistant1_ID) REFERENCES Referee(Referee_ID),
    FOREIGN KEY (Assistant2_ID) REFERENCES Referee(Referee_ID)
);
GO
Alter Table Match_Info Alter Column [Time] Time(0)
GO
```

```
CREATE TABLE Players_Each_Match
(
    Match_ID INT NOT NULL,
    Player_Name VARCHAR(50) NOT NULL,
    Coach_ID VARCHAR(10) NOT NULL,
    Position VARCHAR(5),
    Shirt_Number INT NOT NULL,
    Line_Up VARCHAR(5) NOT NULL,
    Country_ID VARCHAR(5) NOT NULL,
    Event VARCHAR(50),
    PRIMARY KEY (Player_Name, Match_ID),
    FOREIGN KEY (Coach_ID) REFERENCES Coach(Coach_ID),
    FOREIGN KEY (Country_ID) REFERENCES Country(Country_ID),
    FOREIGN KEY (Match_ID) REFERENCES Match_Info(Match_ID)
)
GO
```



Data Transformation – e.g. Split Tables by Power Query

WorldCupMatches - Power Query Editor

File Home Transform Add Column View

Close & Load Refresh Preview Properties Advanced Editor Manage Query

Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Manage Parameters Data source settings New Source Recent Sources Enter Data

Table.TransformColumnTypes(#"Split Column by Position2",{{"Referee.2.2.1", type text}, {"Referee.2.2.2", type text}})

	Referee.1	Referee.2.1	Referee.2.2.1	Referee.2.2.2	Assistant 1	Assistant 2
1	LOMBARDI Domingo	(	URU	)	CRISTOPHE Henry (BEL)	REGO Gilberto (BRA)
2	MACIAS Jose	(	ARG	)	MATEUCCI Francisco (URU)	WARNKEN Alberto (CHI)
3	TEJADA Anibal	(	URU	)	VALLARINO Ricardo (URU)	BALWAY Thomas (FRA)
4	WARNKEN Alberto	(	CHI	)	LANGENUS Jean (BEL)	MATEUCCI Francisco (URU)
5	REGO Gilberto	(	BRA	)	SAUCEDO Ulises (BOL)	RADULESCU Constantin (ROU)
6	CRISTOPHE Henry	(	BEL	)	APHESTEGUY Martin (URU)	LANGENUS Jean (BEL)
7	MATEUCCI Francisco	(	URU	)	LOMBARDI Domingo (URU)	WARNKEN Alberto (CHI)
8	MACIAS Jose	(	ARG	)	APHESTEGUY Martin (URU)	TEJADA Anibal (URU)
9	LANGENUS Jean	(	BEL	)	BALWAY Thomas (FRA)	CRISTOPHE Henry (BEL)
10	TEJADA Anibal	(	URU	)	LOMBARDI Domingo (URU)	REGO Gilberto (BRA)
11	SAUCEDO Ulises	(	BOL	)	ALONSO Gualberto (URU)	RADULESCU Constantin (ROU)
12	BALWAY Thomas	(	BOL	)	MATEUCCI Francisco (URU)	VALLEJO Gaspar (MEX)
13	VALLARINO Ricardo	(	URU	)	MACIAS Jose (ARG)	LOMBARDI Domingo (URU)
14	REGO Gilberto	(	BRA	)	WARNKEN Alberto (CHI)	SAUCEDO Ulises (BOL)
15	LANGENUS Jean	(	BEL	)	CRISTOPHE Henry (BEL)	SAUCEDO Ulises (BOL)
16	LANGENUS Jean	(	BEL	)	VALLEJO Gaspar (MEX)	WARNKEN Alberto (CHI)
17	REGO Gilberto	(	BRA	)	SAUCEDO Ulises (BOL)	BALWAY Thomas (FRA)
18	LANGENUS Jean	(	BEL	)	SAUCEDO Ulises (BOL)	CRISTOPHE Henry (BEL)
19	VAN MOORSEL Johannes	(	NED	)	CAIRONI Camillo (ITA)	BAERT Louis (BEL)
20	BARLASSINA Rinaldo	(	ITA	)	DATTILO Generoso (ITA)	SASSI Otello (ITA)
21	EKLUND Ivan	(	SWE	)	BERANEK Alois (AUT)	BONIVENTO Ferruccio (ITA)
22	BRAUN Eugen	(	AUT	)	CARRARO Albino (ITA)	TURBIANI Giuseppe (ITA)
23	MATTEA Francesco	(	ITA	)	MELANDRI Ermenegildo (ITA)	BAERT Jacques (FRA)
24	BIRLEM Alfred	(	GER	)	CARMINATI Ettore (ITA)	IVANCICS Mihaly (HUN)
25	MERCET Rene	(	SUI	)	ESCARTIN Pedro (ESP)	ZENISEK Bohumil (TCH)
26	LANGENUS Jean	(	BEL	)	SCARPI Giuseppe (ITA)	SCORZONI Raffaele (ITA)
27	BERANEK Alois	(	AUT	)	MOHAMED Youssef (EGY)	BAERT Jacques (FRA)
28	BARLASSINA Rinaldo	(	ITA	)	MERCET Rene (SUI)	VAN MOORSEL Johannes (NED)

6 COLUMNS, 852 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 6:30 PM

Query Settings

PROPERTIES

Name WorldCupMatches

APPLIED STEPS

Source

Promoted Headers

Changed Type

Removed Other Columns

Split Column by Position

Changed Type1

Split Column by Position1

Changed Type2

Split Column by Position2

Changed Type3



- Coach.csv
- Country(Revised).csv
- Match_Info(Revised)_1.csv
- Match_Score.csv
- Players_Each_Match.csv
- Referee(Revised).csv
- Stadium(Revised).csv
- World_Cup.csv



Data Transformation – e.g. Split Tables by Power Query

	A	B	C	D	E	F
1	Year	Host_Country_ID	Winner_Country_ID	RunnersUp_Country_ID	Third_Country_ID	Fourth_Country_ID
2	1930	URU	URU	ARG	USA	YUG
3	1934	ITA	ITA	TCH	GER	AUT
4	1938	FRA	ITA	HUN	BRA	SWE
5	1950	BRA	URU	BRA	SWE	ESP
6	1954	SUI	FRG	HUN	AUT	URU
7	1958	SWE	BRA	SWE	FRA	FRG
8	1962	CHI	BRA	TCH	CHI	YUG
9	1966	ENG	ENG	FRG	POR	URS
10	1970	MEX	BRA	ITA	FRG	URU
11	1974	GER	FRG	NED	POL	BRA
12	1978	ARG	ARG	NED	BRA	ITA
13	1982	ESP	ITA	FRG	POL	FRA
14	1986	MEX	ARG	FRG	FRA	BEL
15	1990	ITA	FRG	ARG	ITA	ENG
16	1994	USA	BRA	ITA	SWE	BUL
17	1998	FRA	FRA	BRA	CRO	NED
18	2002	JPN	BRA	GER	TUR	KOR
19	2006	GER	ITA	FRA	GER	POR
20	2010	RSA	ESP	NED	GER	URU
21	2014	BRA	GER	ARG	NED	BRA

- Coach.csv
- Country(Revised).csv
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- Match_Score.csv
- Players_Each_Match.csv
- Referee(Revised).csv
- Stadium(Revised).csv
- World_Cup.csv



Data Transformation – e.g. Split Tables by Power Query

	A	B	C	D	E	F	G	H	I	J	K
1	Year	RoundID	MatchID	Date	Time	Stage	Stadium_ID	Referee_ID	Assistant1_ID	Assistant2_ID	Attendance
2	1930	201	1090	13/7/1930	3:00 pm	Group 4	URU_1	ARG_1	URU_4	CHI_1	18346
3	1930	201	1096	13/7/1930	3:00 pm	Group 1	URU_3	URU_6	BEL_2	BRA_1	4444
4	1930	201	1098	14/7/1930	2:50 pm	Group 3	URU_3	CHI_1	BEL_1	URU_4	2549
5	1930	201	1093	14/7/1930	12:45 pm	Group 2	URU_1	URU_1	URU_2	FRA_1	24059
6	1930	201	1085	15/7/1930	4:00 pm	Group 1	URU_1	BRA_1	BOL_1	ROU_1	23409
7	1930	201	1095	16/7/1930	2:45 pm	Group 1	URU_1	BEL_2	URU_5	BEL_1	9249
8	1930	201	1097	17/7/1930	2:45 pm	Group 4	URU_1	ARG_1	URU_5	URU_1	18306
9	1930	201	1092	17/7/1930	12:45 pm	Group 2	URU_1	URU_4	URU_6	CHI_1	18306
10	1930	201	1099	18/7/1930	2:30 pm	Group 3	URU_2	BEL_1	FRA_1	BEL_2	57735
11	1930	201	1094	19/7/1930	12:50 pm	Group 1	URU_2	URU_1	URU_6	BRA_1	2000
12	1930	201	1086	19/7/1930	3:00 pm	Group 1	URU_2	BOL_1	URU_3	ROU_1	42100
13	1930	201	1089	20/7/1930	3:00 pm	Group 4	URU_2	URU_2	ARG_1	URU_6	12000
14	1930	201	1091	20/7/1930	1:00 pm	Group 2	URU_2	FRA_1	URU_4	MEX_1	25466
15	1930	201	1100	21/7/1930	2:50 pm	Group 3	URU_2	BRA_1	CHI_1	BOL_1	70022
16	1930	201	1084	22/7/1930	2:45 pm	Group 1	URU_2	BEL_1	BEL_2	BOL_1	41459
17	1930	202	1088	26/7/1930	2:45 pm	Semi-final	URU_2	BEL_1	MEX_1	CHI_1	72886
18	1930	202	1101	27/7/1930	2:45 pm	Semi-final	URU_2	BRA_1	BOL_1	FRA_1	79867
19	1930	405	1087	30/7/1930	2:15 pm	Final	URU_2	BEL_1	BOL_1	BEL_2	68346
20	1934	204	1135	27/5/1934	4:30 pm	Preliminary	ITA_15	SUI_1	ESP_1	TCH_1	25000
21	1934	204	1119	27/5/1934	4:30 pm	Preliminary	ITA_16	ITA_7	ITA_12	ITA_10	9000
22	1934	204	1111	27/5/1934	4:30 pm	Preliminary	ITA_10	GER_1	ITA_8	HUN_1	21000

- Coach.csv
- Country(Revised).csv
- Match_Info(Revised)_1.csv**
- Match_Score.csv
- Players_Each_Match.csv
- Referee(Revised).csv
- Stadium(Revised).csv
- World_Cup.csv



Loading Data into SQL Database

```
Select * From Match_Info
GO
INSERT INTO Match_Info
(Year, Round_ID, Match_ID, Date, Time, Stage, Stadium_ID, Referee_ID, Assistant1_ID, Assistant2_ID, Attendance) VALUES
(1930, 201, 1090, '1930/7/13', '3:00 pm', 'Group 4', 'URU_1', 'ARG_1', 'URU_4', 'CHI_1', 18346)
, (1930, 201, 1096, '1930/7/13', '3:00 pm', 'Group 1', 'URU_3', 'URU_6', 'BEL_2', 'BRA_1', 4444)
, (1930, 201, 1098, '1930/7/14', '2:50 pm', 'Group 3', 'URU_3', 'CHI_1', 'BEL_1', 'URU_4', 2549)
, (1930, 201, 1093, '1930/7/14', '12:45 pm', 'Group 2', 'URU_1', 'URU_1', 'URU_2', 'FRA_1', 24059)
, (1930, 201, 1085, '1930/7/15', '4:00 pm', 'Group 1', 'URU_1', 'BRA_1', 'BOL_1', 'ROU_1', 23409)
, (1930, 201, 1095, '1930/7/16', '2:45 pm', 'Group 1', 'URU_1', 'BEL_2', 'URU_5', 'BEL_1', 9249)
, (1930, 201, 1097, '1930/7/17', '2:45 pm', 'Group 4', 'URU_1', 'ARG_1', 'URU_5', 'URU_1', 18306)
, (1930, 201, 1092, '1930/7/17', '12:45 pm', 'Group 2', 'URU_1', 'URU_4', 'URU_6', 'CHI_1', 18306)
, (1930, 201, 1099, '1930/7/18', '2:30 pm', 'Group 3', 'URU_2', 'BEL_1', 'FRA_1', 'BEL_2', 57735)
, (1930, 201, 1094, '1930/7/19', '12:50 pm', 'Group 1', 'URU_2', 'URU_1', 'URU_6', 'BRA_1', 2000)
, (1930, 201, 1086, '1930/7/19', '3:00 pm', 'Group 1', 'URU_2', 'BOL_1', 'URU_3', 'ROU_1', 42100)
, (1930, 201, 1089, '1930/7/20', '3:00 pm', 'Group 4', 'URU_2', 'URU_2', 'ARG_1', 'URU_6', 12000)
, (1930, 201, 1091, '1930/7/20', '1:00 pm', 'Group 2', 'URU_2', 'FRA_1', 'URU_4', 'MEX_1', 25466)
, (1930, 201, 1100, '1930/7/21', '2:50 pm', 'Group 3', 'URU_2', 'BRA_1', 'CHI_1', 'BOL_1', 70022)
, (1930, 201, 1084, '1930/7/22', '2:45 pm', 'Group 1', 'URU_2', 'BEL_1', 'BEL_2', 'BOL_1', 41459)
, (1930, 202, 1088, '1930/7/26', '2:45 pm', 'Semi-finals', 'URU_2', 'BEL_1', 'MEX_1', 'CHI_1', 72886)
, (1930, 202, 1101, '1930/7/27', '2:45 pm', 'Semi-finals', 'URU_2', 'BRA_1', 'BOL_1', 'FRA_1', 79867)
, (1930, 405, 1087, '1930/7/30', '2:15 pm', 'Final', 'URU_2', 'BEL_1', 'BOL_1', 'BEL_2', 68346)
, (1934, 204, 1135, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_15', 'SUI_1', 'ESP_1', 'TCH_1', 25000)
, (1934, 204, 1119, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_16', 'ITA_7', 'ITA_12', 'ITA_10', 9000)
, (1934, 204, 1111, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_10', 'GER_1', 'ITA_8', 'HUN_1', 21000)
, (1934, 204, 1102, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_12', 'AUT_2', 'ITA_5', 'ITA_3', 14000)
, (1934, 204, 1108, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_9', 'ITA_6', 'ITA_9', 'FRA_2', 8000)
, (1934, 204, 1133, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_11', 'SWE_1', 'AUT_1', 'ITA_1', 33000)
, (1934, 204, 1104, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_13', 'NED_1', 'ITA_4', 'BEL_3', 16000)
, (1934, 204, 1141, '1934/5/27', '4:30 pm', 'Preliminary round', 'ITA_3', 'BEL_1', 'ITA_11', 'ITA_2', 9000)
, (1934, 418, 1122, '1934/5/31', '4:30 pm', 'Quarter-finals', 'ITA_9', 'BEL_3', 'TCH_1', 'HUN_1', 35000)
```



Data Cleaning in SQL

Remove anomalies and outliers

```
362 Select * From Coach
363 GO
364 Update Coach
365 Set Coach_Name='Jose Pekerman'
366 Where Coach_ID='ARG_8'
367 GO
```

115 %

Coach_ID	Coach_Name	Nationality	
16	ARG_20	CAP Vladislao	ARG
17	ARG_21	STABILE Guillermo	ARG
18	ARG_3	Marcelo BIELSA	ARG
19	ARG_4	MARTINO Gerardo	ARG
20	ARG_5	HERRERA Helenio	ARG
21	ARG_6	PEKERMANN Jose	ARG
22	ARG_7	LA VOLPE Ricardo	ARG
23	ARG_8	Jos??? P???KERMANN	ARG
24	ARG_9	SOLARI Jorge	ARG
25	AUS_1	POSTECOGLOU Ange	AUS
26	AUT_1	SCHMIDT Georg	AUT
27	AUT_2	ARGAUER Josef	AUT
28	AUT_3	HAPPEL Ernst	AUT
29	AUT_4	PROHASKA Herbert	AUT

Query executed successfully.

Remove duplicates

```
2127 Select * From Coach
2128 Where Coach_ID in ('ARG_6','ARG_8')
2129 GO
2130 Update Coach
2131 Set Coach_Name='PEKERMANN Jose'
2132 Where Coach_ID='ARG_8'
2133 GO
```

115 %

Coach_ID	Coach_Name	Nationality	
1	ARG_6	PEKERMANN Jose	ARG
2	ARG_8	Jose Pekerman	ARG

Replace value

```
Select * From Match_Info
Where Stage like '%third%'
GO
Update Match_Info
Set Stage='Match for third place'
Where Stage like '%third%'
GO
Select * From Country
Where Country_Name like '%China%'
GO
Update Country
Set Country_Name='China'
Where Country_ID='CHN'
GO
Select * From Country
Where Country_Name like '%Korea%'
GO
Update Country
Set Country_Name='Korea'
Where Country_ID='KOR'
GO
```





Data Analysis

Insights to dig out:

1. [Quick Facts](#) about World Cup;
2. What are the [Top Teams](#);
3. What are the [Dark Horses](#);
4. What are the [Common Scores](#);





Data Analysis

1. Quick Facts about World Cup:

```
46 | -----Q1. How many times has FIFA World Cup been hosted Successfully?
47 | Create view Total_Host_Times as
48 | Select Count(Distinct Year) as Total_Host_Times
49 | From World_Cup
50 | GO
```

Total_Host_Times
20

```
55 | -----Q2.How many Countries has been qualified FIFA World Cup in history?
56 | Create View Qualified_Country as
57 | Select Distinct Home_Team as Qualified_Country_ID From Match_Score
58 | Union
59 | Select Distinct Away_Team as Qualified_Country_ID From Match_Score
60 | GO
61 | GO
62 | Select Count(Qualified_Country_ID ) as 'Number_of Qualified_Countries' From Qualified_Country
63 | GO
```

Number_of Qualified_Countries
82

Basic Aggregate, Group by, Union, Join Function

```
98 | -----Q3.How many teams in each World Cup?
99 | With Teams as (
100 | Select Year,Home_Team as Team
101 | From (Match_Info Join Match_Score
102 | ON Match_Info.Match_ID=Match_Score.Match_ID)
103 | Union
104 | Select Year,Away_Team as Team
105 | From (Match_Info Join Match_Score
106 | ON Match_Info.Match_ID=Match_Score.Match_ID)
107 | )
108 | Select Year,Count(Team) as Number_of_Teams
109 | From Teams
110 | Group by Year
111 | GO
```

	Year	Number_of_Teams
7	1962	16
8	1966	16
9	1970	16
10	1974	16
11	1978	16
12	1982	24
13	1986	24
14	1990	24
15	1994	24
16	1998	32
17	2002	32
18	2006	32
19	2010	32



Data Analysis

2. What are the **Top Teams**;
3. What are the **Dark Horses**:

Qualified Times

How many times have this Country entered World-Cup?

Average Position

What is the average Ranking of this Country in history?

Top Teams : **High** Qualified Times, **High** Average Position

Dark Horses: **Low** Qualified Times, **High** Average Position

Historical Performance of each Country

Different Competition **Format** in history:

Due to different number of Qualified teams in each World-Cup and other historical issues, the Competition Format has been changed for several times.

(World-Cup 1950 even had **no Knockout Games!**)

The current format has been put into practice since 1998, Which consists of:

Group Game(32 teams), **Round of 16**, **Quarter-Finals**, **Semi-Finals**, **Match for 3rd Place** & **Final**.

For World-Cup 1986-1994, although there were only 24 teams in Group Games, the format for Knockout Games were as same as current format.

So, the range of data has been decided as **1986-2014** to analyze the Historical Performance



Data Analysis

How far did every country go in each world cup(1986-2014)?

Create View Last_Game_Each_Worldcup_Each_Team as
With Last_Game_Home_Away as (

```
Select
Match_Info.Year,
Match_Score.Home_Team as Team,
Max(Match_Info.Date) as Last_Game_this_Year
From (Match_Info Join Match_Score
ON Match_Info.Match_ID=Match_Score.Match_ID)
Group by Match_Info.Year,Match_Score.Home_Team
```

Union

```
Select
Match_Info.Year,
Match_Score.Away_Team as Team,
Max(Match_Info.Date) as Last_Game_this_Year
From (Match_Info Join Match_Score
ON Match_Info.Match_ID=Match_Score.Match_ID)
Group by Match_Info.Year,Match_Score.Away_Team
```

```
)
Select Year,Team,Max(Last_Game_this_Year) as Last_Game_this_Year
From Last_Game_Home_Away
Group by Last_Game_Home_Away.Year,Last_Game_Home_Away.Team
```

GO

Create a View to show the **Last Game Date** for each country in each World-Cup

Select Year, Country,
Last Game Date
From **Home Team**

Select Year, Country,
Last Game Date
From **Away Team**

Union **Home** and
Away Team Records

Select Year, Country,
Last Game Date
From Union Records



Data Analysis

```

Create View Last_Game_Each_Worldcup_Ea
With Last_Game_Home_Away as (
Select
Match_Info.Year,
Match_Score.Home_Team as Team,
Max(Match_Info.Date) as Last_Game_this
From (Match_Info Join Match_Score
ON Match_Info.Match_ID=Match_Score.Mat
Group by Match_Info.Year,Match_Score.Ho
Union
Select
Match_Info.Year,
Match_Score.Away_Team as Team,
Max(Match_Info.Date) as Last_Game_this
From (Match_Info Join Match_Score
ON Match_Info.Match_ID=Match_Score.Mat
Group by Match_Info.Year,Match_Score.A
)
Select Year,Team,Max(Last_Game_this_Ye
From Last_Game_Home_Away
Group by Last_Game_Home_Away.Year,Last
GO
  
```

	Year	Team	Last_Game_this_Year
1	1930	PER	1930-07-18
2	1930	MEX	1930-07-19
3	1930	FRA	1930-07-19
4	1930	BEL	1930-07-20
5	1930	BRA	1930-07-20
6	1930	BOL	1930-07-20
7	1930	PAR	1930-07-20
8	1930	ROU	1930-07-21
9	1930	CHI	1930-07-22
10	1930	USA	1930-07-26
11	1930	YUG	1930-07-27
12	1930	URU	1930-07-30
13	1930	ARG	1930-07-30
14	1934	ARG	1934-05-27
15	1934	BEL	1934-05-27
16	1934	BRA	1934-05-27
17	1934	FRA	1934-05-27
18	1934	ROU	1934-05-27
19	1934	NED	1934-05-27
20	1934	EGY	1934-05-27
21	1934	USA	1934-05-27
22	1934	SUI	1934-05-31
23	1934	SWE	1934-05-31
24	1934	HUN	1934-05-31



every country go in each world cup(1986-2014)?

How the **Last Game**
in each World-Cup

6

Union **Home** and
Away Team Records

6

Select Year, Country,
Last Game Date
From Union Records





Data Analysis

How far did every country go in each world cup(1986-2014)?

Create View Performance of Each Team from 1986
as Select

```
Match_Info.Year,  
Last_Game_Each_Worldcup_Each_Team.Team,  
Match_Info.Date,  
Match_Info.Stage,  
Match_Score.Home_Team,Match_Score.Home_Team_Goals,  
Match_Score.Away_Team,Match_Score.Away_Team_Goals  
From  
Match_Info Join Match_Score  
On Match_Info.Match_ID=Match_Score.Match_ID
```

```
Join Last_Game_Each_Worldcup_Each_Team  
On (  
Match_Info.Date=Last_Game_Each_Worldcup_Each_Team.Last_Game_this_Year  
And (Match_Score.Home_Team=Last_Game_Each_Worldcup_Each_Team.Team  
or Match_Score.Away_Team=Last_Game_Each_Worldcup_Each_Team.Team)  
)
```

```
Where Match_Info.Year>1982  
GO
```

Create a View to show the Last Game Info(in other words: **Best Result**) for each country in each World-Cup

Select the necessary information from
dbo.Match_Info and **dbo.Match_Score**

Use Last Game Date & Team from View
Last_Game_Each_Worldcup_Each_Team to filter out
the **Best Result** of each country in each world cup

Filter the record by Year

Data Ana

Create View Performance c
as Select

Match_Info.Year,
Last_Game_Each_Worldcup_E
Match_Info.Date,
Match_Info.Stage,
Match_Score.Home_Team,Mat
Match_Score.Away_Team,Mat
From
Match_Info Join Match_Scc
On Match_Info.Match_ID=Ma
Join Last_Game_Each_World
On (
Match_Info.Date=Last_Game
And (Match_Score.Home_Team
or Match_Score.Away_Team=
)
Where Match_Info.Year>198
GO

	Year	Team	Date	Stage	Home_Team	Home_Team_Goals	Away_Team	Away_Team_Goals
1	1986	ALG	1986-06-12	Group D	ALG	0	ESP	3
2	2010	ALG	2010-06-23	Group C	USA	1	ALG	0
3	2014	ALG	2014-06-30	Round of 16	GER	2	ALG	1
4	2006	ANG	2006-06-21	Group D	IRN	1	ANG	1
5	1986	ARG	1986-06-29	Final	ARG	3	FRG	2
6	1990	ARG	1990-07-08	Final	FRG	1	ARG	0
7	1994	ARG	1994-07-03	Round of 16	ROU	3	ARG	2
8	1998	ARG	1998-07-04	Quarter-...	NED	2	ARG	1
9	2002	ARG	2002-06-12	Group F	SWE	1	ARG	1
10	2006	ARG	2006-06-30	Quarter-...	GER	1	ARG	1
11	2010	ARG	2010-07-03	Quarter-...	ARG	0	GER	4
12	2014	ARG	2014-07-13	Final	GER	1	ARG	0
13	2006	AUS	2006-06-26	Round of 16	ITA	1	AUS	0
14	2010	AUS	2010-06-23	Group D	AUS	2	SRB	1
15	2014	AUS	2014-06-23	Group B	AUS	0	ESP	3
16	1990	AUT	1990-06-19	Group A	AUT	2	USA	1
17	1998	AUT	1998-06-23	Group B	ITA	2	AUT	1
18	1986	BEL	1986-06-28	Match fo...	FRA	4	BEL	2
19	1990	BEL	1990-06-26	Round of 16	ENG	1	BEL	0
20	1994	BEL	1994-07-02	Round of 16	GER	3	BEL	2
21	1998	BEL	1998-06-25	Group E	BEL	1	KOR	1
22	2002	BEL	2002-06-17	Round of 16	BRA	2	BEL	0
23	2014	BEL	2014-07-05	Quarter-...	ARG	1	BEL	0
24	2014	BIH	2014-06-25	Group F	BIH	3	IRN	1
25	1994	BOL	1994-06-27	Group C	BOL	1	ESP	3
26	1986	BRA	1986-06-21	Quarter-...	BRA	1	FRA	1
27	1990	BRA	1990-06-24	Round of 16	BRA	0	ARG	1
28	1994	BRA	1994-07-17	Final	BRA	0	ITA	0

world cup(1986-2014)?

ords: **Best Result**) for

m from View
p_Each_Team to filter out
ntry in each world cup



Data Analysis

How far did every country go in each world cup(1986-2014)?

```
Select *,Case
```

```
When Stage='Final' Then 2
```

```
When Stage like '%third%' Then 4
```

```
When Stage='Quarter-finals' Then 8
```

```
When Stage='Round of 16' Then 16
```

```
When (Stage like '%Group%' And Year<1998)Then 24
```

```
When (Stage like '%Group%' And Year>=1998)Then 32
```

```
End as Result
```

```
From Performance_of_Each_Team_from_1986
```

```
Order by Team,Date
```

```
GO
```

Categorize the **Best Result** and convert into Numerical Values

```
Select *,Case
```

```
When Stage='Final' Then
```

```
When Stage like '%thi
```

```
When Stage='Quarter-f
```

```
When Stage='Round of
```

```
When (Stage like '%Gr
```

```
When (Stage like '%Gr
```

```
End as Result
```

```
From Performance_of_F
```

```
Order by Team,Date
```

```
GO
```

	Year	Team	Date	Stage	Home_Team	Home_Team_Goals	Away_Team	Away_Team_Goals	Result
1	1986	ALG	1986-06-12	Group D	ALG	0	ESP	3	24
2	2010	ALG	2010-06-23	Group C	USA	1	ALG	0	32
3	2014	ALG	2014-06-30	Round of 16	GER	2	ALG	1	16
4	2006	ANG	2006-06-21	Group D	IRN	1	ANG	1	32
5	1986	ARG	1986-06-29	Final	ARG	3	FRG	2	2
6	1990	ARG	1990-07-08	Final	FRG	1	ARG	0	2
7	1994	ARG	1994-07-03	Round of 16	ROU	3	ARG	2	16
8	1998	ARG	1998-07-04	Quarter-...	NED	2	ARG	1	8
9	2002	ARG	2002-06-12	Group F	SWE	1	ARG	1	32
10	2006	ARG	2006-06-30	Quarter-...	GER	1	ARG	1	8
11	2010	ARG	2010-07-03	Quarter-...	ARG	0	GER	4	8
12	2014	ARG	2014-07-13	Final	GER	1	ARG	0	2
13	2006	AUS	2006-06-26	Round of 16	ITA	1	AUS	0	16
14	2010	AUS	2010-06-23	Group D	AUS	2	SRB	1	32
15	2014	AUS	2014-06-23	Group B	AUS	0	ESP	3	32
16	1990	AUT	1990-06-19	Group A	AUT	2	USA	1	24
17	1998	AUT	1998-06-23	Group B	ITA	2	AUT	1	32
18	1986	BEL	1986-06-28	Match fo...	FRA	4	BEL	2	4
19	1990	BEL	1990-06-26	Round of 16	ENG	1	BEL	0	16
20	1994	BEL	1994-07-02	Round of 16	GER	3	BEL	2	16
21	1998	BEL	1998-06-25	Group E	BEL	1	KOR	1	32
22	2002	BEL	2002-06-17	Round of 16	BRA	2	BEL	0	16
23	2014	BEL	2014-07-05	Quarter-...	ARG	1	BEL	0	8
24	2014	BIH	2014-06-25	Group F	BIH	3	IRN	1	32
25	1994	BOL	1994-06-27	Group C	BOL	1	ESP	3	24
26	1986	BRA	1986-06-21	Quarter-...	BRA	1	FRA	1	8
27	1990	BRA	1990-06-24	Round of 16	BRA	0	ARG	1	16
28	1994	BRA	1994-07-17	Final	BRA	0	ITA	0	2

convert into



Data Analysis

Score Distribution

4. What are the Common Scores;

```

----Q.2 What is the Score distribution?
----A.2
Create View Score_1986_2014 as
Select Year, Stage,
Home_Team_Goals,
Away_Team_Goals,
Concat(Convert(varchar(5), Home_Team_Goals),
'- ', Convert(varchar(5), Away_Team_Goals)) as Score
From
Match_Info join Match_Score
On Match_Info.Match_ID=Match_Score.Match_ID
Where Year>1982
GO

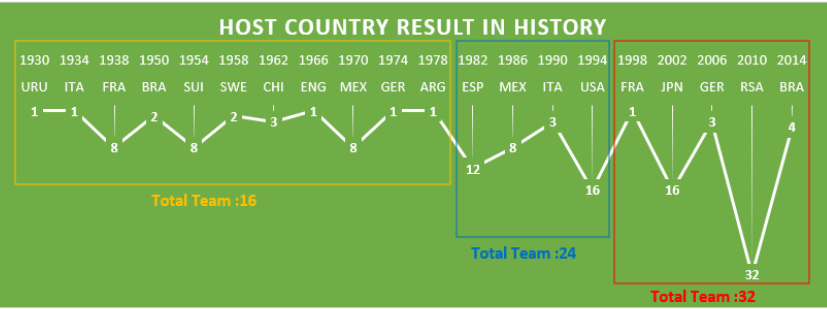
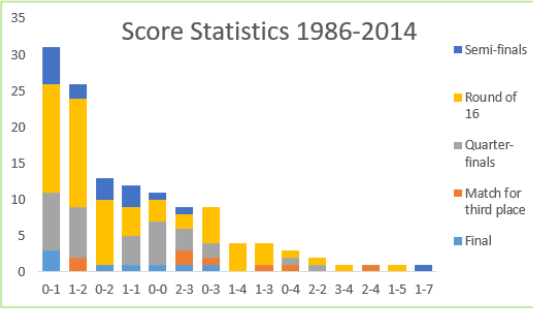
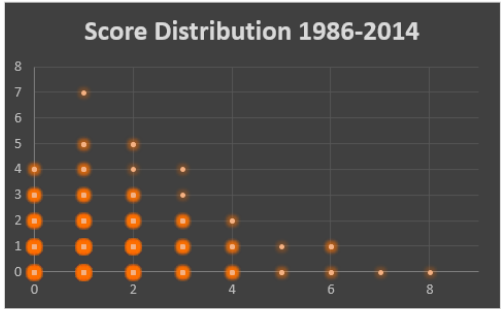
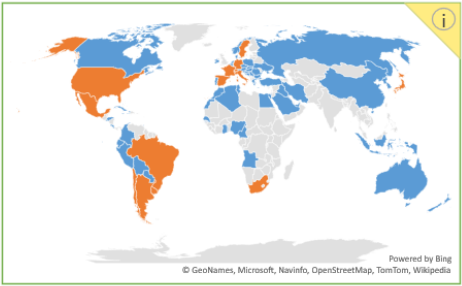
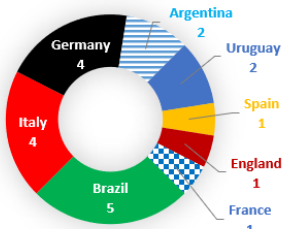
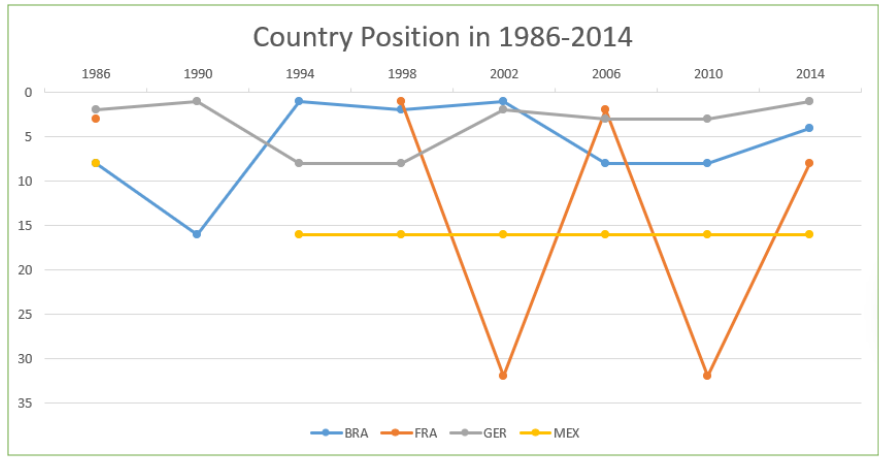
Select * From Score_1986_2014
Order by Year
GO
  
```



	Year	Stage	Home_Team_Goals	Away_Team_Goals	Score
43	1986	Group E	1	1	1-1
44	1986	Group C	6	0	6-0
45	1986	Group B	0	1	0-1
46	1986	Group B	1	0	1-0
47	1986	Group A	2	3	2-3
48	1986	Group F	0	0	0-0
49	1986	Group F	1	3	1-3
50	1986	Group B	1	1	1-1
51	1986	Group F	1	0	1-0
52	1986	Group E	0	0	0-0
53	1990	Round of 16	0	1	0-1
54	1990	Group B	0	1	0-1
55	1990	Final	1	0	1-0
56	1990	Semi-finals	1	1	1-1
57	1990	Group B	1	1	1-1
58	1990	Group B	2	0	2-0
59	1990	Quarter-finals	0	0	0-0
60	1990	Group A	1	0	1-0
61	1990	Group A	0	1	0-1
62	1990	Group A	2	1	2-1
63	1990	Round of 16	1	0	1-0
64	1990	Group E	1	2	1-2
65	1990	Group E	2	0	2-0



FIFA WORLD CUP DASHBOARD





Conclusion

Top Teams :

Brazil: **5 Champion**, Stable high performance

Germany: **4 Champion**, Stable high performance

Italy: **4 Champion**, performance falling downwards

Argentina: 2 Champion, performance uprising

France: 1 Champion, performance uprising

Rank 16 for **Continuous 6** World-Cup:

Mexico

Dark Horses:

Turkey(3), Ukraine(8), Senegal(8)

Common Score

0-1,1-2

Result of World-Cup 2018

Brazil: Position 8

Germany: End in Group Games

Italy: Not even qualified

Argentina: Position 8

Mexico: Still Rank 16...

France :



What's more

1. Historical competition could be retrieved, and statistics could be carried out if 2 Countries has been provided.
2. Some of the tables(e.g. Players, Stadium, etc.) and attributes(e.g. attendance, Half time goals etc.) not in use this time could be used for future analysis to dredge more insights
3. Quantitative Analysis





Q & A





Thank you!

Li Zheming

