

```
Q1. getwd()
setwd("C:/n")
data <- read.csv("WorldCups.csv")
print(data)
is.data.frame(data)
```

```
print(data$Year)
```

```
da <- subset(data, Year == 2010)
print(da)
```

```
print(max(data$winner))
```

Q2. Descriptive Statistics → are a part of statistics that can be used to describe data. It is used to summarize the attributes of a enables researchers to present data in a more meaningful way such that easy interpretation can be made.

Population -

min → 563626

mean → 6073769

median → 4339367

Population density

min = 1264

mean = 354.549

median = 102.600

Akshat

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max = 10298

murders

min = 7.0

1st qu = 49.0

median = 1510

mean = 384.0

gun murders

min = 2

Median = 97

mean = 184

max = 1257

Inferential statistics \Rightarrow it is a branch of statistic that is used to make inference about the population by analyzing a sample. When the ~~whole~~ population data is very larger it becomes difficult to use it in such cases certain samples are larger than are representative of the entire population. Some methodologies used in inferential statistics are as follows.

- 1) Hypothesis testing
- 2) Regression Analysis

Ankit

```
getwd()
data <- read.csv("worldcup.csv")
print(data)
is.data.frame(data)
print(data$year)
```

```
d <- subset(data, year == 2010)
print(d)
```

```
getwd()
[1] "c:/n"
> data <- read.csv("worldcups.csv")
> print(data)
```

	Year	Country	winner	Runners.Up	Third	Fourth
1	1930	Uruguay	Uruguay	Argentina	USA	Yugoslavia
2	1934	Italy	Italy	Czechoslovakia	Germany	Austria
3	1938	France	Italy	Hungary	Brazil	Sweden
4	1950	Brazil	Uruguay	Brazil	Sweden	Spain
5	1954	Switzerland	Germany FR	Hungary	Austria	Uruguay
6	1958	Sweden	Brazil	Sweden	France	Germany FR
7	1962	Chile	Brazil	Czechoslovakia	Chile	Yugoslavia
8	1966	England	England	Germany FR	Portugal	Soviet Union
9	1970	Mexico	Brazil	Italy	Germany FR	Uruguay
10	1974	Germany	Germany FR	Netherlands	Poland	Brazil
11	1978	Argentina	Argentina	Netherlands	Brazil	Italy
12	1982	Spain	Italy	Germany FR	Poland	France
13	1986	Mexico	Argentina	Germany FR	France	Belgium
14	1990	Italy	Germany FR	Argentina	Italy	England
15	1994	USA	Brazil	Italy	Sweden	Bulgaria
16	1998	France	France	Brazil	Croatia	Netherlands
17	2002	Korea/Japan	Brazil	Germany	Turkey	Korea Republic
18	2006	Germany	Italy	France	Germany	Portugal
19	2010	South Africa	Spain	Netherlands	Germany	Uruguay
20	2014	Brazil	Germany	Argentina	Netherlands	Brazil
	GoalsScored	QualifiedTeams	MatchesPlayed	Attendance		
1	70	13	18	590.549		
2	70	16	17	363.000		
3	84	15	18	375.700		
4	88	13	22	1.045.246		
5	140	16	26	768.607		
6	126	16	35	819.810		
7	89	16	32	893.172		
8	89	16	32	1.563.135		
9	95	16	32	1.603.975		
10	97	16	38	1.865.753		
11	102	16	38	1.545.791		
12		

```

11      102      16      38  1.545.791
12      146      24      52  2.109.723
13      132      24      52  2.394.031
14      115      24      52  2.516.215
15      141      24      52  3.587.538
16      171      32      64  2.785.100
17      161      32      64  2.705.197
18      147      32      64  3.359.439
19      145      32      64  3.178.856
20      171      32      64  3.386.810
> is.data.frame(data)
[1] TRUE
> print(data$Year)
[1] 1930 1934 1938 1950 1954 1958 1962 1966 1970 1974 1978 1982 1986 1990 1994 1998
[17] 2002 2006 2010 2014
> d <- subset(data,Year == 2010)
> print(d)
  Year Country Winner Runners.Up Third Fourth GoalsScored QualifiedTeams
19 2010 South Africa Spain Netherlands Germany Uruguay      145          32
  MatchesPlayed Attendance
19           64   3.178.856
> print(max(data$winner))
[1] "Uruguay"
> |

```