1.Read the csv data file.

players\_data=read.csv(file=file.choose(),header = TRUE)

2.Display head of data

head(players\_data)

3.Display first n rows specified.

head(players\_data,n=10)

4.Display tail of data.

tail(players\_data)

5.Display n rows specified from bottom

tail(players\_data,n=10)

6.Determining Type of data class(players\_data)

7.Table command table(players\_data$potential)

table(players\_data$height\_cm)

8.Determine the structure of data

str(players\_data)

9.Summarising the data

summary(players\_data)

10.Displaying Dimension of the data

dim(players\_data)

11.Displaying length of attack column

length(players\_data$potential)

12.Displaying column short\_names of data

colshort\_names(players\_data)

13.Displaying structure of some columns in the data

class(players\_data$short\_name)typeof(players\_data$short\_name)

14.Displaying type of some data structure in the data

typeof(players\_data$height\_cm)

15.List of variables present in book data ls(players\_data)

16.Display 1st row and all colum6ns of data frame players\_data[1,]

17.Display all rows and 1st column of data frame

players\_data[,1]

18.Display data in 2nd row and 3rd column of the data frame

players\_data[2,3]

19.Display 1st and 2nd row and all columns players\_data[1:2,]

20.Display all rows and first 3 columns

players\_data[,3]

21.

22.Renaming a column in data frame temp\_players=players\_datashort\_names(temp\_players)[short\_names(temp\_players)=="Total"]<-"Total\_Number") temp\_players[1,]

23.Adding a new column to dataframe temp\_players[["New\_col"]]<-rep(c(1,2,3,4,5),209) temp\_players[1:10,]

24.Display Sum of Attack column sum(players\_data[9])

25.Display the maximum value of the potential column

max(players\_data[9])

26.Display the minimum value of the potential column

min(players\_data[4])

27.Attaching player data

attach(players\_data)

28.Now we can use variables inside players data min(height\_cm)

tail(potential)

29.Sorting height\_cm variable in ascending order

sort(height\_cm)

30.Sorting height\_cm variable in descending order sort(height\_cm,decreasing = TRUE)

31.Detaching book data detach(players\_data)

32.Using with operator to use variables inside data with(players\_data,potential)

33.Finding median of data median(players\_data$potential)

34.Finding mean of data mean(players\_data$potential)

35.Finding standard deviation of data sd(players\_data$height\_cm)

36.Finding variance of data var(players\_data$height\_cm)

37.Order the weight\_kg column in ascending order order(players\_data[9])

38.Order the potential column in descending order order(players\_data$potential,decreasing =TRUE)

39.Rank of potential column rank(players\_data$height\_cm)

40.Rank of potential column with average as tie breaker rank(players\_data$potential,ties.method = "average")

41.Histogram ggplot(players\_data, aes(x = potential)) +geom\_histogram()

42.Histogram of potential column and its density ggplot(players\_data,aes(x=potential))+ geom\_histogram(fill="cornsilk",color="blue", size=0.2)+geom\_density(color="black")

43.Line graph of potential column and its density ggplot(players\_data,aes(x=height\_cm))+ geom\_density(fill="blue",alpha=.4)

44.Line graph of potential column taking two alpha values ggplot(players\_data,aes(x=potential))+ geom\_line(stat="density")+ geom\_line(stat="density",adjust=0.25, color="red")+geom\_density(fill='blue',alpha=0.2)

45.Dot Plot library(ggplot2) ggplot(players\_data,aes(x=height\_cm,y=overall))+geom\_dotplot(binaxis="y",stackdir = "center", binwidth = 4,fill="green")

46.Box Plot ggplot(players\_data, aes(x=height\_cm,y=potential))+geom\_boxplot(width=0.1,fill='black')+stat\_summary(func='median',fill='white',shape=21)

47.Density plot for review and potential ggplot(players\_data,aes(x=overall,y=potential))+geom\_density2d(aes(colour=..level..))

48.Violin Plot height\_cm and potential ggplot(players\_data,aes(x=height\_cm,y=potential))+geom\_violin()