Session 7

Assignment 1

# Histogram for all variables in a dataset mtcars.

1. Write a program to create histograms for all columns.

Solution:

mtcars

str(mtcars)

# all variables are numeric

setwd("c:/Data Analytics /Assignment1")

par(mfrow=c(3,4)) # set the graph area

lapply(mtcars[2:11], hist) # apply histogram plot function to all column of mtcars

2. Check the probability distribution of all variables in mtcars

Solution:

par(mfrow=c(3,4)) # set the graph area

# writing a function to plot probability

prob <- function(prob){

x <- sort(prob)

hx <- dnorm(prob)

p <- plot(x, hx, type="l")

}

lapply(mtcars[2:11], prob) # applying the function to all the columns

3. Write a program to create boxplot for all variables.

Solution:

par(mfrow=c(3,4))

lapply(mtcars[2:11], boxplot) # applying the function to all the columns