ACADGILD ASSIGNMENT 7.1

SESSION 7: Basic Statistics

1. Histogram for all variables in a dataset mtcars.

Write a program to create histograms for all columns

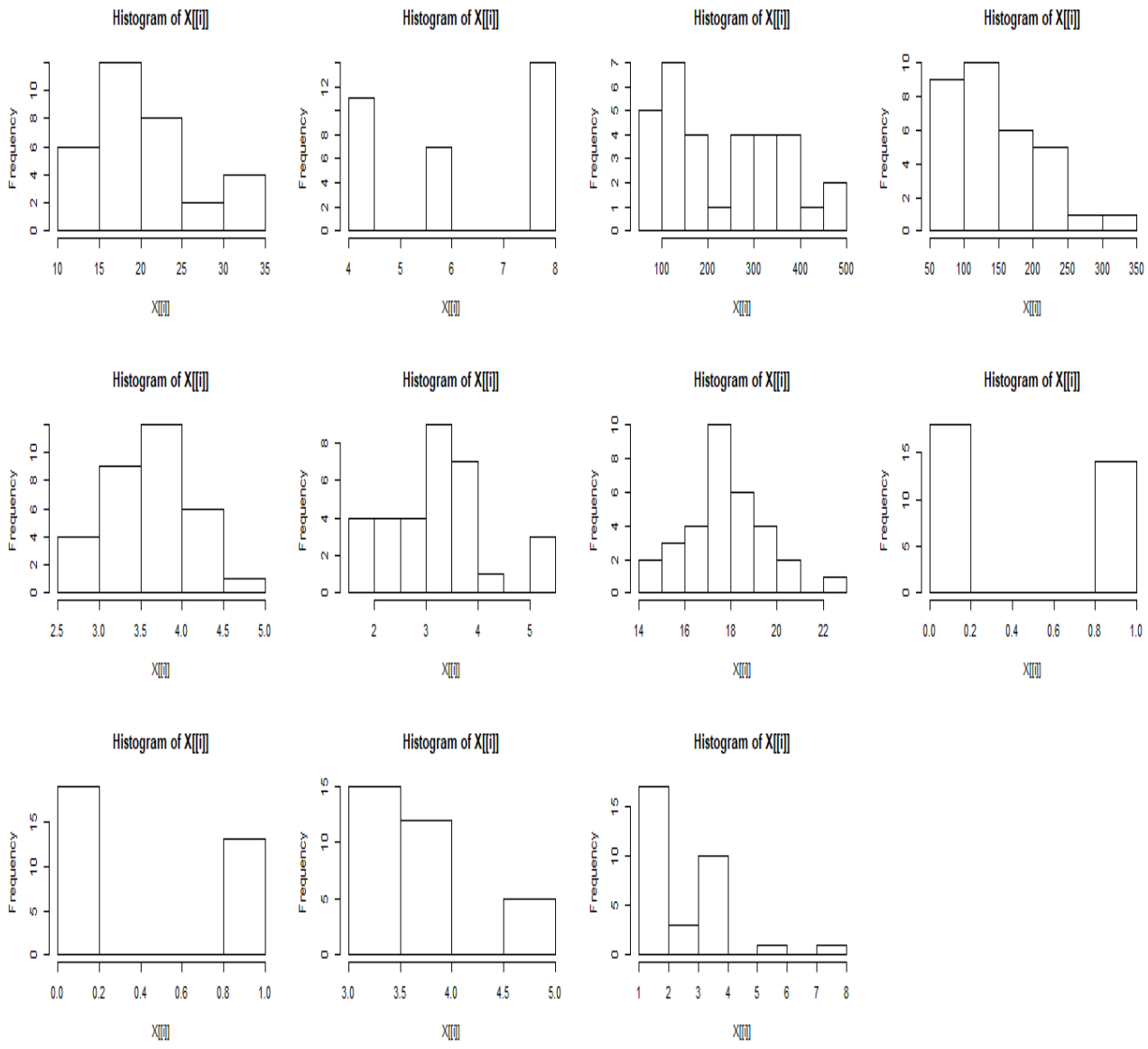
Answer:

```
library(readr)
mtcars <- read_csv("C:/Users/ManojChowdary/Downloads/mtcars.csv")
View(mtcars)
str(mtcars)
par(mfrow=c(3,4))
lapply(mtcars[2:12],hist) # applying the function to all the columns
```

Output from console

```
Parsed with column specification:
cols(
  model = col_character(),
  mpg = col_double(),
  cyl = col_double(),
  disp = col_double(),
  hp = col_double(),
  drat = col_double(),
  wt = col_double(),
  qsec = col_double(),
  vs = col_double(),
  am = col_double(),
  gear = col_double(),
```

carb = col_double()

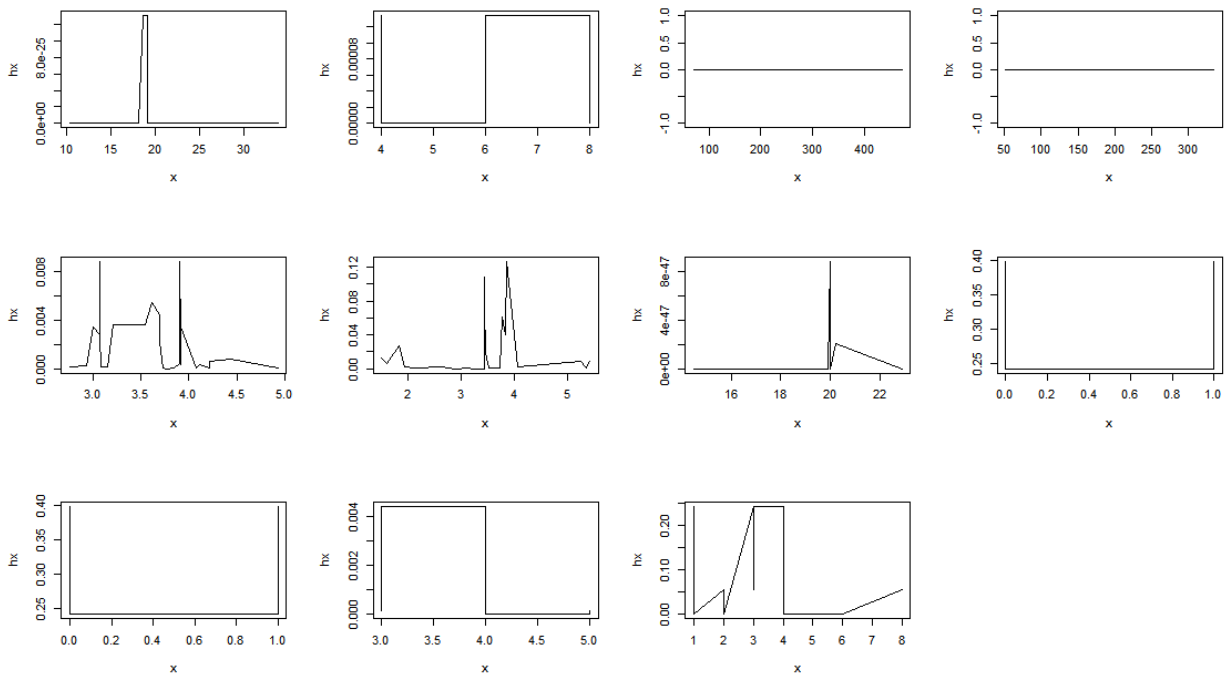


2. Check the probability distribution of all variables in mtcars.

Answer:

```
 library(readr)
mtcars <- read_csv("C:/Users/ManojChowdary/Downloads/mtcars.csv")
View(mtcars)
mtcars
str(mtcars)
par(mfrow=c(3,4))
prob <- function(prob){ x <- sort(prob)
hx <- dnorm(prob)
p <- plot(x, hx, type="l")
}
lapply(mtcars[2:12], prob) # applying the function to all the columns
```

Output from console



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

Answer:

```
library(readr)
mtcars <- read_csv("C:/Users/ManojChowdary/Downloads/mtcars.csv")
View(mtcars)
mtcars
```

```
str(mtcars)

library(ggplot2)

par(mfrow=c(3,4))

lapply(mtcars[2:12],boxplot) # applying the function to all the columns
```

Output from console