

SESSION 7: Basic Statistics

Assignment 1

Problem Statement

1. Histogram for all variables in a dataset mtcars. Write a program to create histograms for all columns

```
library(purrr)

library(tidyr)

library(ggplot2)

mtcars %>% keep(is.numeric) %>% gather() %>%
  ggplot(aes(value)) + facet_wrap(~ key, scales = "free") +
  geom_histogram()
```

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

```
hist(mtcars$mpg, breaks=10, xlab = "Miles per gallon", main = "Histogram of Miles per
gallon of cars", xlim = range(10:35))
```

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

```
boxplot(mpg~cyl,data=mtcars, main="Car Milage Data",
  xlab="Number of Cylinders", ylab="Miles Per Gallon")
```