## Assignment 2

My Name, id = 11111111

19 September, 2022

## Starting with R-Markdown

In the following R-Markdown document some data are created followed by calculation of some summary statistics and display of graphical summaries. All the results are embedded for you in the report when you knit the document into a report.

The following R chunk creates a dataset in a vector and stores it in R's memory using the name x. You will have been given some directions in how to adapt this dataset on Blackboard.

x = c(10, 23, 14, 12, 34, 26, 28)

The mean of this data is

mean(x)

## [1] 21

The summary statistics (minimum, maximum,  $Q_1$ , median, mean and  $Q_3$ ) obtained from the summary() function are:

# Insert your code here

The five number summary which uses Tukey's method to estimate the lower and upper quartiles  $(Q_1 \text{ and } Q_3)$  is given below. Notice the small differences in these quartiles.

*# Insert your code here* 

The boxplot of the data below also uses Tukey's method. I would describe the shape of the distribution using the boxplot as [insert your answer here].

boxplot(x)



A histogram is given below. I would describe the shape of the distribution using the histogram as [insert your answer here].

Use the help system in **R** to learn how to use the **breaks** argument in the **hist** function to include around 10 breakpoints. To use the help system type **help(hist)**