FML

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## Executive summary - This dataset is about Electronic cards transection details which consist of the time period and Data value.

#Loading the dataset by assigning the variable name as Electroniic\_cards

Electronic\_cards <- read.csv("C:/Users/amanp/OneDrive/Desktop/electronic-card-transactions-december-2023-csv-tables.csv")  
Electronic\_cards

## Series\_reference Period Data\_value UNITS  
## 1 ECTA.S19A1 2001.03 2462.5 Dollars  
## 2 ECTA.S19A1 2002.03 17177.2 Dollars  
## 3 ECTA.S19A1 2003.03 22530.5 Dollars  
## 4 ECTA.S19A1 2004.03 28005.1 Dollars  
## 5 ECTA.S19A1 2005.03 30629.6 Dollars  
## 6 ECTA.S19A1 2006.03 33317.4 Dollars  
## 7 ECTA.S19A1 2007.03 36232.6 Dollars  
## 8 ECTA.S19A1 2008.03 39198.5 Dollars  
## 9 ECTA.S19A1 2009.03 40629.4 Dollars  
## 10 ECTA.S19A1 2010.03 41815.4 Dollars  
## 11 ECTA.S19A1 2011.03 43848.6 Dollars  
## 12 ECTA.S19A1 2012.03 47004.9 Dollars  
## 13 ECTA.S19A1 2013.03 49188.8 Dollars  
## 14 ECTA.S19A1 2014.03 52108.2 Dollars  
## 15 ECTA.S19A1 2015.03 54410.5 Dollars  
## 16 ECTA.S19A1 2016.03 57389.5 Dollars  
## 17 ECTA.S19A1 2017.03 60616.6 Dollars  
## 18 ECTA.S19A1 2018.03 64238.6 Dollars  
## 19 ECTA.S19A1 2019.03 66777.7 Dollars  
## 20 ECTA.S19A1 2020.03 68844.3 Dollars  
## 21 ECTA.S19A1 2021.03 68203.1 Dollars  
## 22 ECTA.S19A1 2022.03 71690.6 Dollars  
## 23 ECTA.S19A1 2023.03 78138.4 Dollars  
## 24 ECTA.S19A2 2005.03 26469.8 Dollars  
## 25 ECTA.S19A2 2006.03 28502.5 Dollars  
## 26 ECTA.S19A2 2007.03 31000.7 Dollars  
## 27 ECTA.S19A2 2008.03 33293.2 Dollars  
## 28 ECTA.S19A2 2009.03 34258.5 Dollars  
## 29 ECTA.S19A2 2010.03 35712.7 Dollars  
## 30 ECTA.S19A2 2011.03 37132.3 Dollars  
## 31 ECTA.S19A2 2012.03 39561.9 Dollars  
## 32 ECTA.S19A2 2013.03 40945.5 Dollars  
## 33 ECTA.S19A2 2014.03 42895.6 Dollars  
## 34 ECTA.S19A2 2015.03 45331.2 Dollars  
## 35 ECTA.S19A2 2016.03 48446.8 Dollars  
## 36 ECTA.S19A2 2017.03 51519.4 Dollars  
## 37 ECTA.S19A2 2018.03 54817.6 Dollars  
## 38 ECTA.S19A2 2019.03 57151.8 Dollars  
## 39 ECTA.S19A2 2020.03 59701.6 Dollars  
## 40 ECTA.S19A2 2021.03 60264.6 Dollars  
## 41 ECTA.S19A2 2022.03 62989.4 Dollars  
## 42 ECTA.S19A2 2023.03 68555.4 Dollars  
## 43 ECTA.S19A9 2001.03 98999.0 Dollars  
## 44 ECTA.S19A9 2002.03 78765.0 Dollars  
## 45 ECTA.S19A9 2003.03 87546.0 Dollars  
## 46 ECTA.S19A9 2004.03 36878.7 Dollars  
## 47 ECTA.S19A9 2005.03 40756.2 Dollars  
## 48 ECTA.S19A9 2006.03 44303.8 Dollars  
## 49 ECTA.S19A9 2007.03 48616.7 Dollars  
## 50 ECTA.S19A9 2008.03 52669.1 Dollars  
## 51 ECTA.S19A9 2009.03 54475.5 Dollars  
## 52 ECTA.S19A9 2010.03 55977.4 Dollars  
## 53 ECTA.S19A9 2011.03 58624.9 Dollars  
## 54 ECTA.S19A9 2012.03 62614.7 Dollars  
## Group  
## 1 Total values - Electronic card transactions A/S/T by division  
## 2 Total values - Electronic card transactions A/S/T by division  
## 3 Total values - Electronic card transactions A/S/T by division  
## 4 Total values - Electronic card transactions A/S/T by division  
## 5 Total values - Electronic card transactions A/S/T by division  
## 6 Total values - Electronic card transactions A/S/T by division  
## 7 Total values - Electronic card transactions A/S/T by division  
## 8 Total values - Electronic card transactions A/S/T by division  
## 9 Total values - Electronic card transactions A/S/T by division  
## 10 Total values - Electronic card transactions A/S/T by division  
## 11 Total values - Electronic card transactions A/S/T by division  
## 12 Total values - Electronic card transactions A/S/T by division  
## 13 Total values - Electronic card transactions A/S/T by division  
## 14 Total values - Electronic card transactions A/S/T by division  
## 15 Total values - Electronic card transactions A/S/T by division  
## 16 Total values - Electronic card transactions A/S/T by division  
## 17 Total values - Electronic card transactions A/S/T by division  
## 18 Total values - Electronic card transactions A/S/T by division  
## 19 Total values - Electronic card transactions A/S/T by division  
## 20 Total values - Electronic card transactions A/S/T by division  
## 21 Total values - Electronic card transactions A/S/T by division  
## 22 Total values - Electronic card transactions A/S/T by division  
## 23 Total values - Electronic card transactions A/S/T by division  
## 24 Total values - Electronic card transactions A/S/T by division  
## 25 Total values - Electronic card transactions A/S/T by division  
## 26 Total values - Electronic card transactions A/S/T by division  
## 27 Total values - Electronic card transactions A/S/T by division  
## 28 Total values - Electronic card transactions A/S/T by division  
## 29 Total values - Electronic card transactions A/S/T by division  
## 30 Total values - Electronic card transactions A/S/T by division  
## 31 Total values - Electronic card transactions A/S/T by division  
## 32 Total values - Electronic card transactions A/S/T by division  
## 33 Total values - Electronic card transactions A/S/T by division  
## 34 Total values - Electronic card transactions A/S/T by division  
## 35 Total values - Electronic card transactions A/S/T by division  
## 36 Total values - Electronic card transactions A/S/T by division  
## 37 Total values - Electronic card transactions A/S/T by division  
## 38 Total values - Electronic card transactions A/S/T by division  
## 39 Total values - Electronic card transactions A/S/T by division  
## 40 Total values - Electronic card transactions A/S/T by division  
## 41 Total values - Electronic card transactions A/S/T by division  
## 42 Total values - Electronic card transactions A/S/T by division  
## 43 Total values - Electronic card transactions A/S/T by division  
## 44 Total values - Electronic card transactions A/S/T by division  
## 45 Total values - Electronic card transactions A/S/T by division  
## 46 Total values - Electronic card transactions A/S/T by division  
## 47 Total values - Electronic card transactions A/S/T by division  
## 48 Total values - Electronic card transactions A/S/T by division  
## 49 Total values - Electronic card transactions A/S/T by division  
## 50 Total values - Electronic card transactions A/S/T by division  
## 51 Total values - Electronic card transactions A/S/T by division  
## 52 Total values - Electronic card transactions A/S/T by division  
## 53 Total values - Electronic card transactions A/S/T by division  
## 54 Total values - Electronic card transactions A/S/T by division

## Performing descriptive statistics of quantitative and categorical variables.

summary(Electronic\_cards)

## Series\_reference Period Data\_value UNITS   
## Length:54 Min. :2001 Min. : 2462 Length:54   
## Class :character 1st Qu.:2006 1st Qu.:36942 Class :character   
## Mode :character Median :2011 Median :48532 Mode :character   
## Mean :2012 Mean :49134   
## 3rd Qu.:2017 3rd Qu.:60124   
## Max. :2023 Max. :98999   
## Group   
## Length:54   
## Class :character   
## Mode :character   
##   
##   
##

#Performing Summary analysis for Quantative variable

summary(Electronic\_cards$Data\_value)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## 2462 36942 48532 49134 60124 98999

#Performing Summary analysis for categorical variable

summary(Electronic\_cards$UNITS)

## Length Class Mode   
## 54 character character

head(Electronic\_cards)

## Series\_reference Period Data\_value UNITS  
## 1 ECTA.S19A1 2001.03 2462.5 Dollars  
## 2 ECTA.S19A1 2002.03 17177.2 Dollars  
## 3 ECTA.S19A1 2003.03 22530.5 Dollars  
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## 6 ECTA.S19A1 2006.03 33317.4 Dollars  
## Group  
## 1 Total values - Electronic card transactions A/S/T by division  
## 2 Total values - Electronic card transactions A/S/T by division  
## 3 Total values - Electronic card transactions A/S/T by division  
## 4 Total values - Electronic card transactions A/S/T by division  
## 5 Total values - Electronic card transactions A/S/T by division  
## 6 Total values - Electronic card transactions A/S/T by division

dim(Electronic\_cards)

## [1] 54 5

str(Electronic\_cards)

## 'data.frame': 54 obs. of 5 variables:  
## $ Series\_reference: chr "ECTA.S19A1" "ECTA.S19A1" "ECTA.S19A1" "ECTA.S19A1" ...  
## $ Period : num 2001 2002 2003 2004 2005 ...  
## $ Data\_value : num 2462 17177 22531 28005 30630 ...  
## $ UNITS : chr "Dollars" "Dollars" "Dollars" "Dollars" ...  
## $ Group : chr "Total values - Electronic card transactions A/S/T by division" "Total values - Electronic card transactions A/S/T by division" "Total values - Electronic card transactions A/S/T by division" "Total values - Electronic card transactions A/S/T by division" ...

class(Electronic\_cards)

## [1] "data.frame"

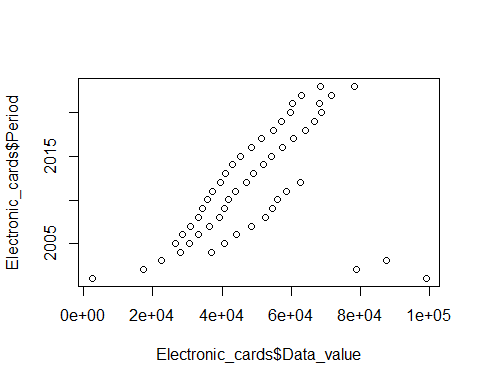
## Transforming the data in logical format

as.logical(Electronic\_cards$Data\_value)

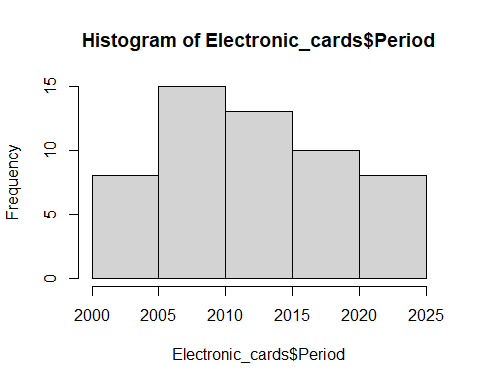
## [1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE  
## [16] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE  
## [31] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE  
## [46] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE

## Plotting scatter plot for Data value and Period

plot(Electronic\_cards$Data\_value, Electronic\_cards$Period)



## Plotting Histogram for Period  
hist(Electronic\_cards$Period)



library(knitr)