Introduction to Plotting and Model Creation

Yogindra Raghav

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```
library("plotrix")
```

```
## Warning: package 'plotrix' was built under R version 3.4.4
```

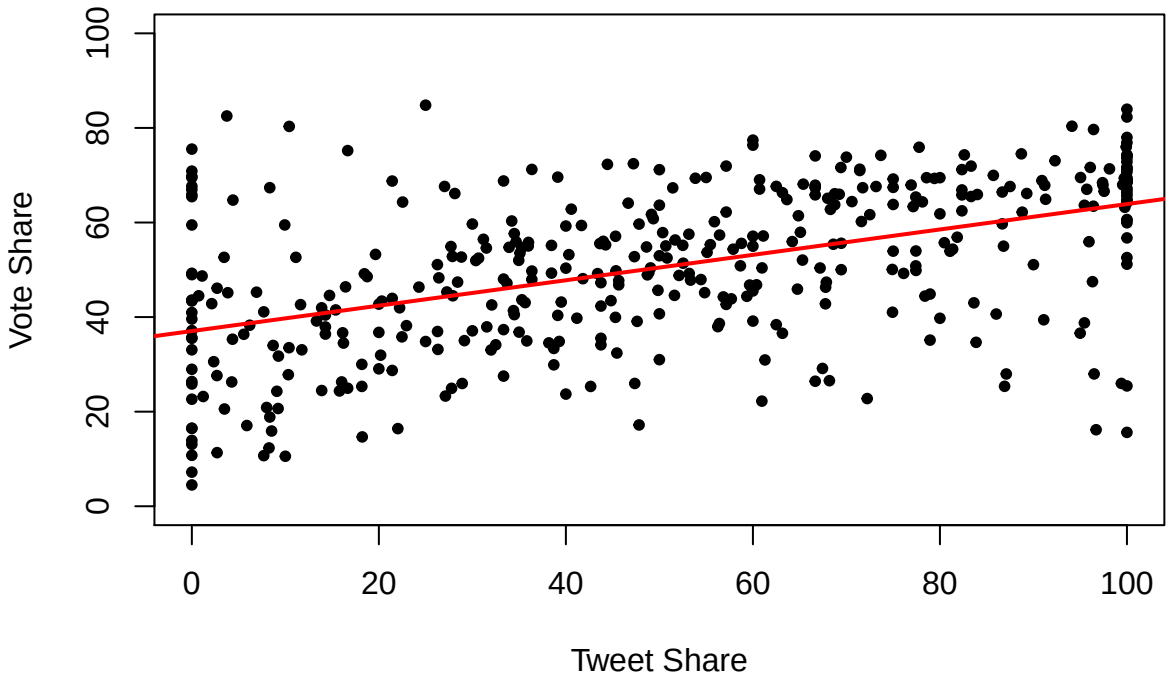
```
dat<-read.table("C:/Users/Yogindra Raghav/Downloads/mtmv_data_10_12.csv", header = TRUE,
                sep = ",")
attach(dat)
```

This chunk of code reads the data in by allowing users to choose csv file and then uses attach() function for easier access of column headers.

```
model_namebi<-lm(vote_share~mshare)
m10<-lm(vote_share~mshare)
a10<-m10$coefficients[1]
b10<-m10$coefficients[2]

m12<-lm(vote_share_12~mshare_12)
a12<-m12$coefficients[1]
b12<-m12$coefficients[2]
plot(mshare,vote_share, pch=20, cex=1.0, ylim=c(0, 100), xlab="Tweet Share",
     ylab="Vote Share")

abline(a10, b10, lwd=2, col=2)
```



This code runs the simple linear regression model for a given data set using the lm() function which stands for linear model.

These lines are responsible for first making the scatter plot using the plot() function and then adding a line to a plot with the abline() function.

ORIGINIAL FROM MDSR BOOK:

```
library(xtable)
library(mdsr)
```

```
## Loading required package: dplyr
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
## Loading required package: lattice
```

```
## Loading required package: ggformula
```

```
## Loading required package: ggplot2
```

```
## Loading required package: ggstance
```

```
##
## Attaching package: 'ggstance'

## The following objects are masked from 'package:ggplot2':
##
##     geom_errorbarh, GeomErrorbarh

##
## New to ggformula?  Try the tutorials:
##  learnr::run_tutorial("introduction", package = "ggformula")
##  learnr::run_tutorial("refining", package = "ggformula")

## Loading required package: mosaicData

## Loading required package: Matrix

##
## The 'mosaic' package masks several functions from core packages in order to add
## additional features.  The original behavior of these functions should not be affected by this.
##
## Note: If you use the Matrix package, be sure to load it BEFORE loading mosaic.

##
## In accordance with CRAN policy, the 'mdsr' package
##            no longer attaches
## the 'tidyverse' package automatically.
## You may need to 'library(tidyverse)' in order to
##            use certain functions.
```

```
options(xtable.comment= FALSE)
mod = lm(cesd ~ mcs + sex, data = HELPmiss)
xtable(mod)
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	52.7204	1.1762	44.82	0.0000
mcs	-0.6507	0.0331	-19.64	0.0000
sexfemale	2.8730	0.9948	2.89	0.0041

MY OWN ANALYSIS USING IRIS DATASET:

```
options(xtable.comment= FALSE)
mod = lm(Sepal.Length~Petal.Length, data = iris)
xtable(mod)
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	4.3066	0.0784	54.94	0.0000
Petal.Length	0.4089	0.0189	21.65	0.0000