# Get quantmod

if (!require("quantmod")) {

install.packages("quantmod")

library(quantmod)

}

start <- as.Date("2016-01-01")

end <- as.Date("2016-10-01")

# Let's get Apple stock data; Apple's ticker symbol is AAPL. We use the

# quantmod function getSymbols, and pass a string as a first argument to

# identify the desired ticker symbol, pass 'yahoo' to src for Yahoo!

# Finance, and from and to specify date ranges

# The default behavior for getSymbols is to load data directly into the

# global environment, with the object being named after the loaded ticker

# symbol. This feature may become deprecated in the future, but we exploit

# it now.

getSymbols("AAPL", src = "yahoo", from = start, to = end)

## As of 0.4-0, 'getSymbols' uses env=parent.frame() and

## auto.assign=TRUE by default.

##

## This behavior will be phased out in 0.5-0 when the call will

## default to use auto.assign=FALSE. getOption("getSymbols.env") and

## getOptions("getSymbols.auto.assign") are now checked for alternate defaults

##

## This message is shown once per session and may be disabled by setting

## options("getSymbols.warning4.0"=FALSE). See ?getSymbols for more details.

## [1] "AAPL"

# What is AAPL?

class(AAPL)

## [1] "xts" "zoo"

# Let's see the first few rows

head(AAPL)

## AAPL.Open AAPL.High AAPL.Low AAPL.Close AAPL.Volume

## 2016-01-04 102.61 105.37 102.00 105.35 67649400

## 2016-01-05 105.75 105.85 102.41 102.71 55791000

## 2016-01-06 100.56 102.37 99.87 100.70 68457400

## 2016-01-07 98.68 100.13 96.43 96.45 81094400

## 2016-01-08 98.55 99.11 96.76 96.96 70798000

## 2016-01-11 98.97 99.06 97.34 98.53 49739400

## AAPL.Adjusted

## 2016-01-04 102.61218

## 2016-01-05 100.04079

## 2016-01-06 98.08303

## 2016-01-07 93.94347

## 2016-01-08 94.44022

## 2016-01-11 95.96942

plot(AAPL[, "AAPL.Close"], main = "AAPL")

stock\_change = stocks %>% log %>% diff

head(stock\_change)