1. Introduction

Below are the questionaire. Here I created this file to apply `MCMCpack` and `forecast` to compelete the questions prior to completed the `Ridge`, `ElasticNet` and `LASSO` regression (quite alot of models for comparison)[1].

[1] We can use `cv.glmnet()` in `glmnet` package or `caret` package for cross validation models. You can refer to Algorithmic Trading and Successful Algorithmic Trading which applied cross-validation in focasting in financial market. You can buy the ebook with full Python coding of Successful Algorithmic Trading as well.

2. Content

2.1 Question 1

2.1.1 Read Data

I use 3 years data for the question as experiment, 1st year data is burn-in data for statistical modelling and prediction purpose while following 2 years data for forecasting and staking. There have 252 trading days within a year.

```
## get currency dataset online.
## http://stackoverflow.com/questions/24219694/get-symbols-quantmod-ohlc-currency-data
#'@ getFX('USD/JPY', from = '2014-01-01', to = '2017-01-20')

## getFX() doesn't shows Op, Hi, Lo, Cl price
## but only price. Therefore no idea to place
## bets.
#'@ USDJPY <- getSymbols('JPY=X', src = 'yahoo', from = '2014-01-01',
#'@                      to = '2017-01-20', auto.assign = FALSE)
#'@ names(USDJPY) <- str_replace_all(names(USDJPY), 'JPY=X', 'USDJPY')
#'@ USDJPY <- xts(USDJPY[, -1], order.by = USDJPY$Date)

#'@ saveRDS(USDJPY, './data/USDJPY.rds')
USDJPY <- read_rds(path = "./data/USDJPY.rds")
mbase <- USDJPY

## dateID
dateID <- index(mbase)
dateID0 <- ymd("2015-01-01")
dateID <- dateID[dateID > dateID0]

dim(mbase)

## [1] 797   6

summary(mbase)
```