1. Perform the below given activities:

a. Take Apple Stock Prices from Yahoo Finance for last 90 days

b. Predict the Stock closing prices for next 15 days.

c. Submit your accuracy

d. After 15 days again collect the data and compare with your forecast

library(quantmod)

Stock\_df<-as.data.frame(getSymbols(Symbols = "AAPL", src = "yahoo", from = "2017-05-08", env = NULL))

Stock\_dates<- as.data.frame(as.POSIXlt(rownames(Stock\_df)))

colnames(Stock\_dates) <- "Dates"

Stock\_df$Open = Stock\_df[,1]

Stock\_df$High = Stock\_df[,2]

Stock\_df$Low = Stock\_df[,3]

Stock\_df$Close = Stock\_df[,4]

Stock\_df$Volume = Stock\_df[,5]

Stock\_df$Adj = Stock\_df[,6]

Stock\_df <- Stock\_df[,c(7,8,9,10,11,12)]

x <- as.data.frame(xts(Stock\_df$Close,Stock\_dates$Date))

fit <- auto.arima(x,ic="bic")

fit.forecast <- forecast(fit)

fit.forecast

forecast.data<- as.data.frame(fit.forecast)

forecast.data$newcolname <- Sys.Date() + seq\_len(nrow(forecast.data)) - 1

Point Forecast Lo 80 Hi 80 Lo 95 Hi 95

2018-05-08 185.16 182.2090 188.1110 180.6468 189.6732

2018-05-09 185.16 180.9866 189.3334 178.7773 191.5427

2018-05-10 185.16 180.0487 190.2714 177.3429 192.9771

2018-05-11 185.16 179.2579 191.0621 176.1336 194.1865

2018-05-14 185.16 178.5613 191.7587 175.0681 195.2519

2018-05-15 185.16 177.9315 192.3885 174.1049 196.2151

2018-05-16 185.16 177.3523 192.9677 173.2191 197.1009

2018-05-17 185.16 176.8132 193.5068 172.3947 197.9253

2018-05-18 185.16 176.3069 194.0131 171.6203 198.6997

2018-05-21 185.16 175.8280 194.4920 170.8879 199.4321