library(quantmod)

coins <- c("BTC-USD", "BNB-USD", "ETH-USD", "XRP-USD", "LTC-USD")

getSymbols(coins, from = "2018-01-01", to = "2021-10-31", src = "yahoo")

df = data.frame(diff(log(`BTC-USD`[,6]))[-1], diff(log(`BNB-USD`[,6]))[-1],

diff(log(`ETH-USD`[,6]))[-1], diff(log(`XRP-USD`[,6]))[-1],

diff(log(`LTC-USD`[,6]))[-1])

colnames(df) <- c("BTC", "BNB", "ETH", "XRP", "LTC")

head(df);

factors <- ("VIX")

getSymbols(factors, from = "2018-01-01", to = "2021-10-31", src = "yahoo")

VIX <- VIX$VIX.Adjusted

head(VIX);