Hw3-1

install.packages("digest", repos='http://cran.us.r-project.org')

library("digest")

s1=digest("I learn a lot from this class when I am proper listening to the professor","sha256")

s2=digest("I do not learn a lot from this class when I am absent and playing on my Iphone","sha256")

s1

1. "c16700de5a5c1961e279135f2be7dcf9c187cb6b21ac8032308c715e1ce9964c"

s2

[1] "2533d529768409d1c09d50451d9125fdbaa6e5fd4efdeb45c04e3c68bcb3a63e"

Hw3-4

install.packages("rjson",repos = "http://cran.us.r-project.org")

library("rjson")

json\_file="http://crix.hu-berlin.de/data/crix.json"

json\_data=fromJSON(file=json\_file)

crix\_data\_frame=as.data.frame(json\_data)

crix\_data\_frame\_t<-t(crix\_data\_frame)

time<-crix\_data\_frame\_t[seq(1,2350,by=2)]

price<-crix\_data\_frame\_t[seq(2,2350,by=2)]

crix\_data\_frame<-cbind(time,price)

time\_series<-ts(data=price,start =c(2014,7,31),frequency = 365)

plot(time\_series)

install.packages("tseries")

library(tseries)

adf.test(time\_series)

#Because p-value is greater than printed p-value, we can't reject the hypothesis#