

# 1.R

*Toshiba*

*Sun Nov 30 18:16:07 2014*

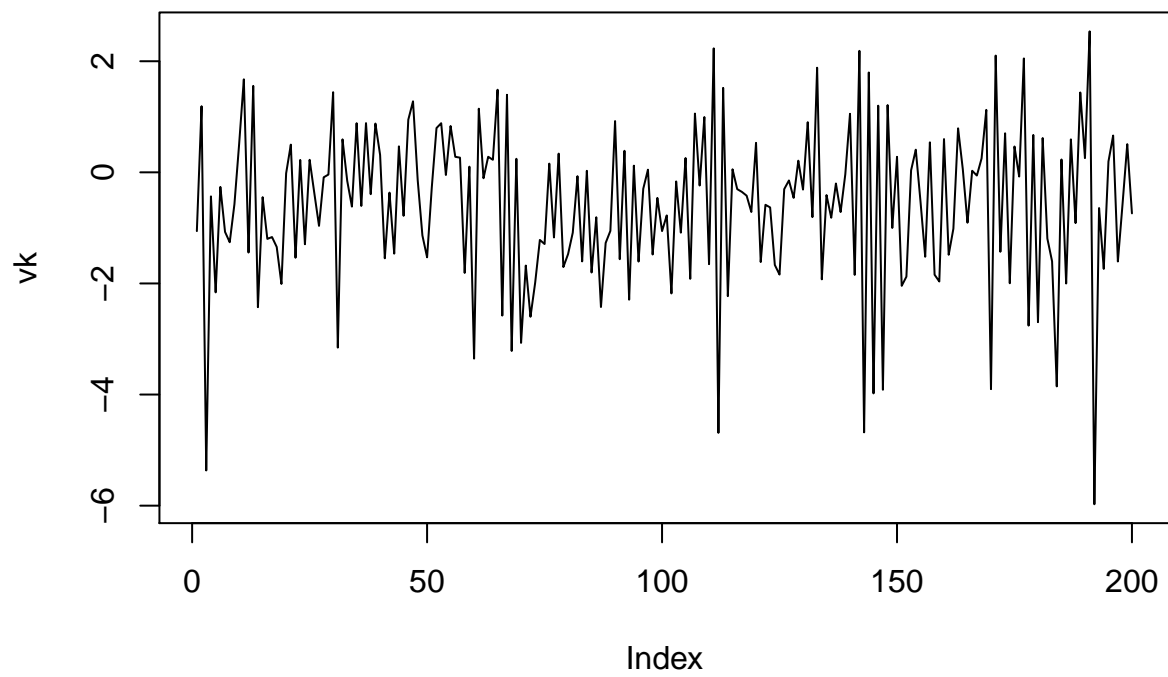
```
library(TSA)
```

```
## Loading required package: leaps
## Loading required package: locfit
## locfit 1.5-9.1    2013-03-22
## Loading required package: mgcv
## Loading required package: nlme
## This is mgcv 1.8-0. For overview type 'help("mgcv-package")'.
## Loading required package: tseries
##
## Attaching package: 'TSA'
##
## The following objects are masked from 'package:stats':
##
##     acf, arima
##
## The following object is masked from 'package:utils':
##
##     tar
```

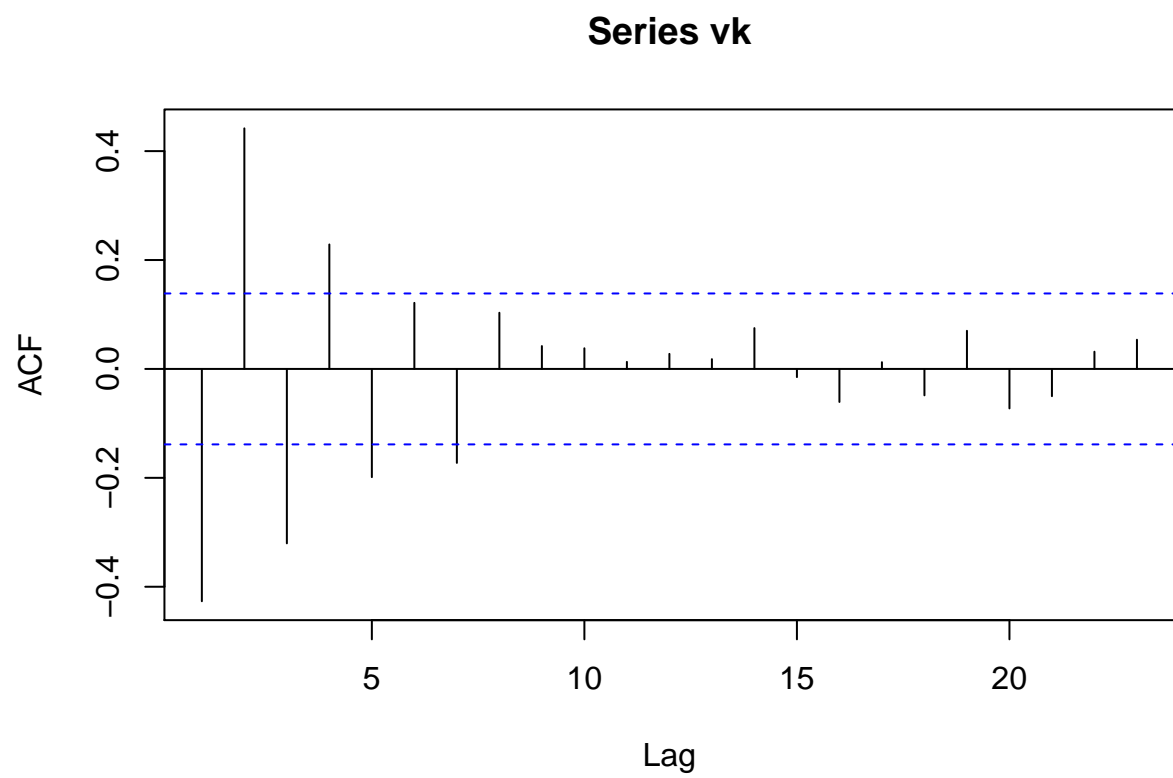
```
library(tsDyn)
```

```
## Warning: package 'tsDyn' was built under R version 3.1.2
```

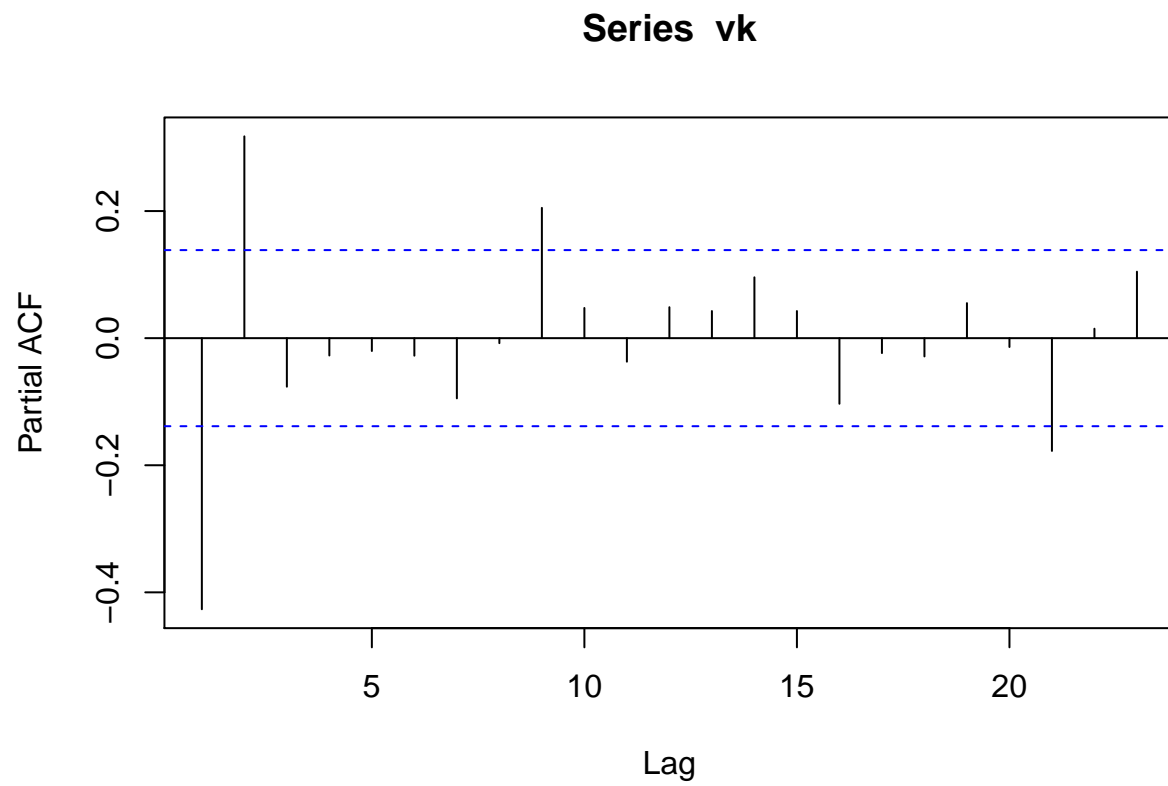
```
setwd("C:/Users/Toshiba/Desktop/vishal iit/5th sem/Applied time series analysis/assignments/project")
load("projqla.Rdata")
plot(vk,type='l')
```



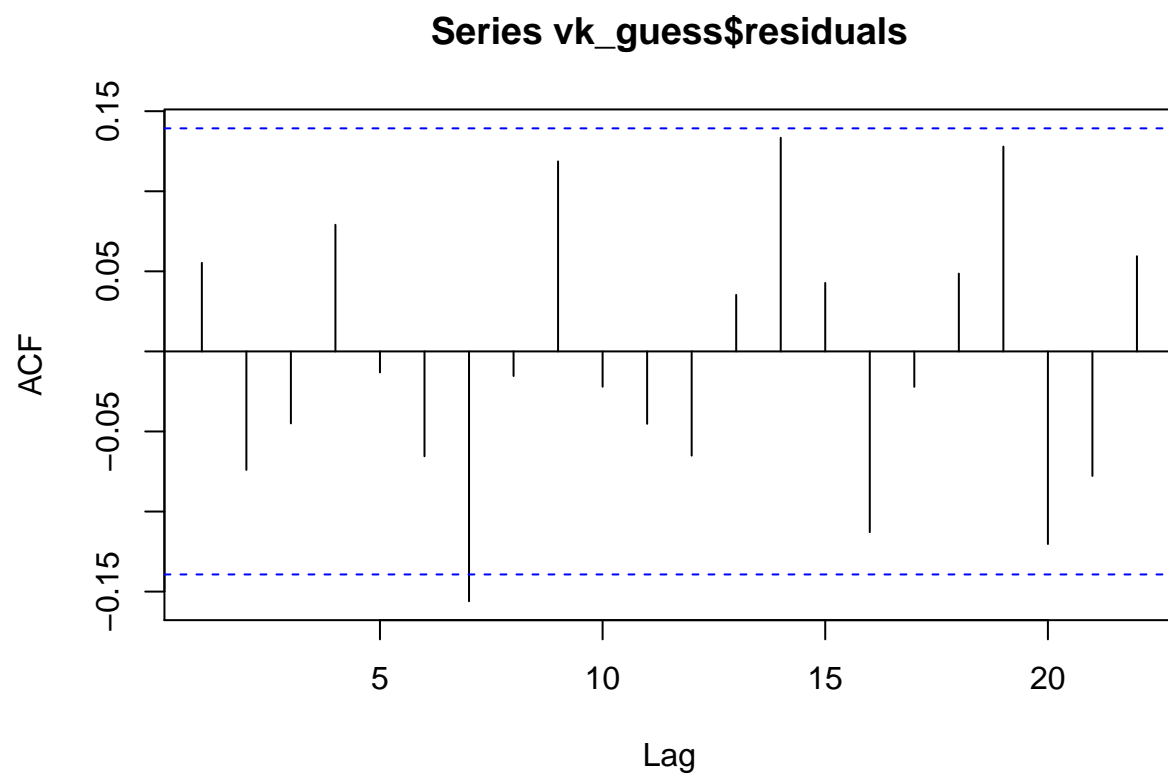
```
acf(vk)
```



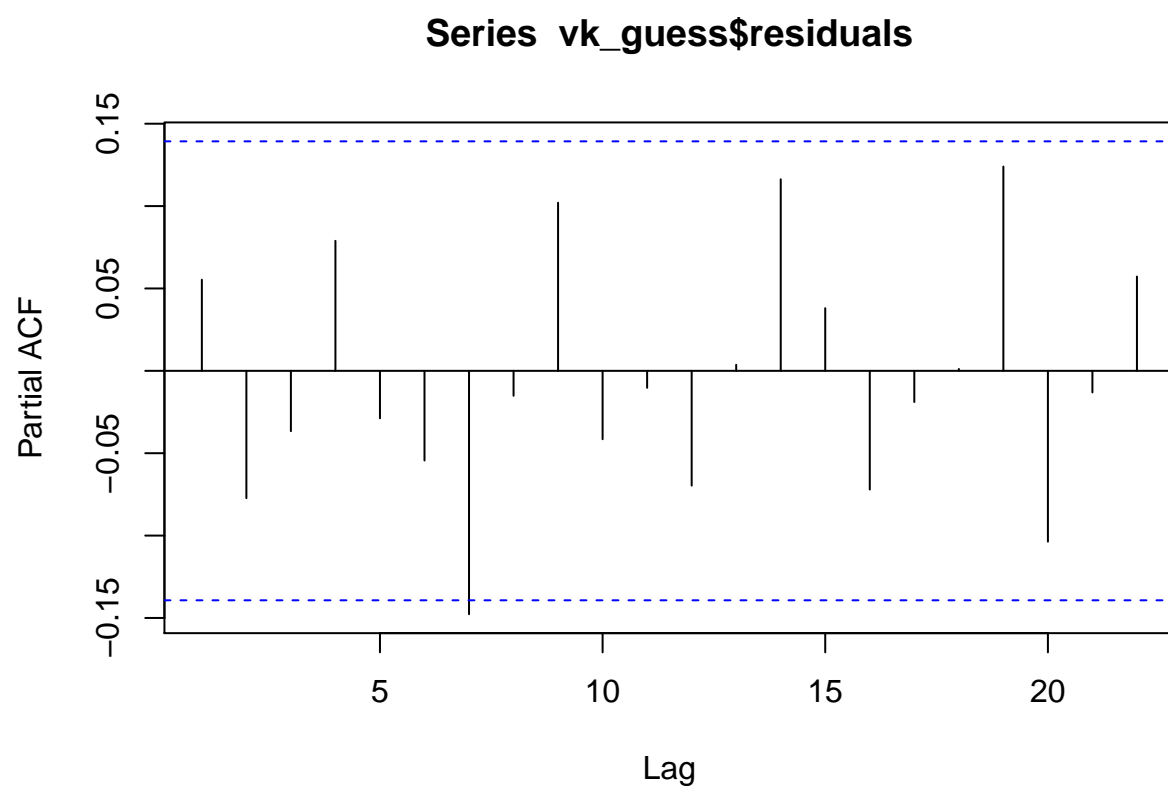
```
pacf(vk)
```



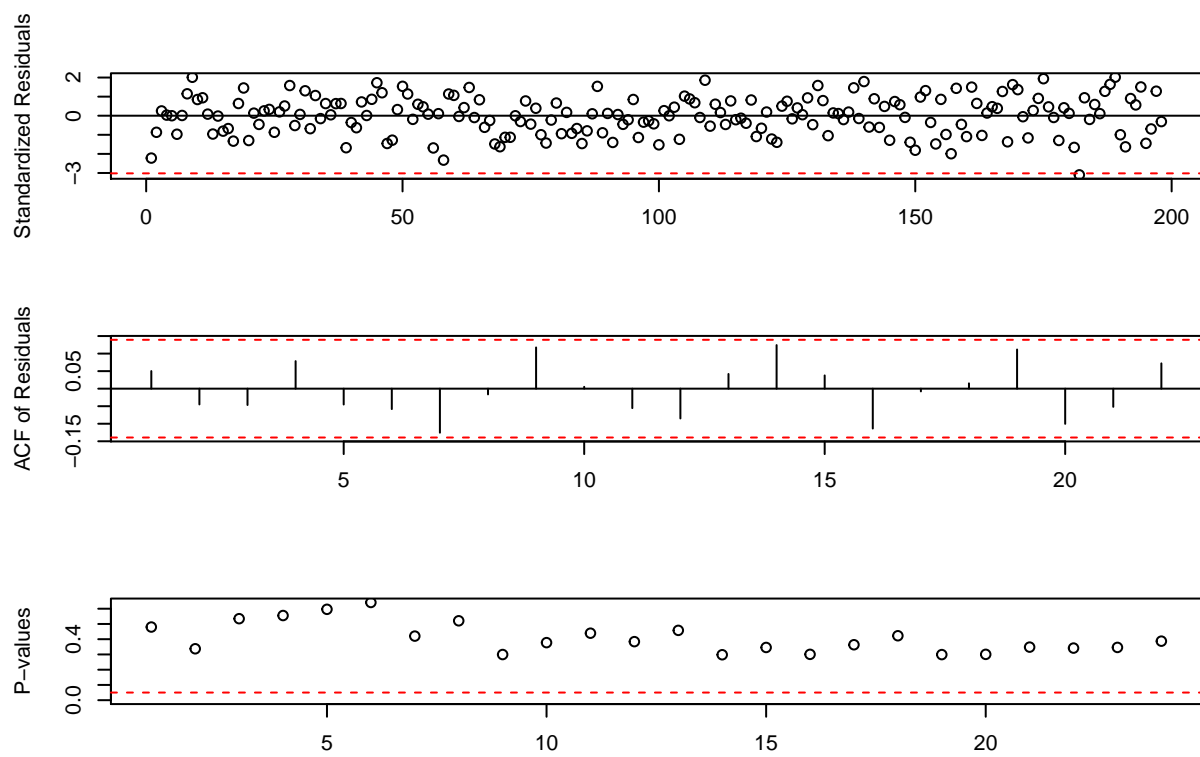
```
nonlinear_test=Tsay.test(vk,order=2)# non linear  
vk_guess=tar(vk,2,1,1,method="MAIC")  
acf(vk_guess$residuals)
```



```
pacf(vk_guess$residuals)
```



```
#summary(vk_guess)  
tsdiag.TAR(vk_guess)
```



```
epsk=vk_guess$residuals  
  
epskr1<-sample(epsk,size=198,replace=T)  
vk_mod=vk_guess
```