

# R PLOT COMMANDS

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## 1. INTRODUCTION

When we only want to see a pattern of data, the default setting of R will give us a quick plot. However, sometimes, we want to adjust the plot according to our taste. Below shows several frequently asked options.

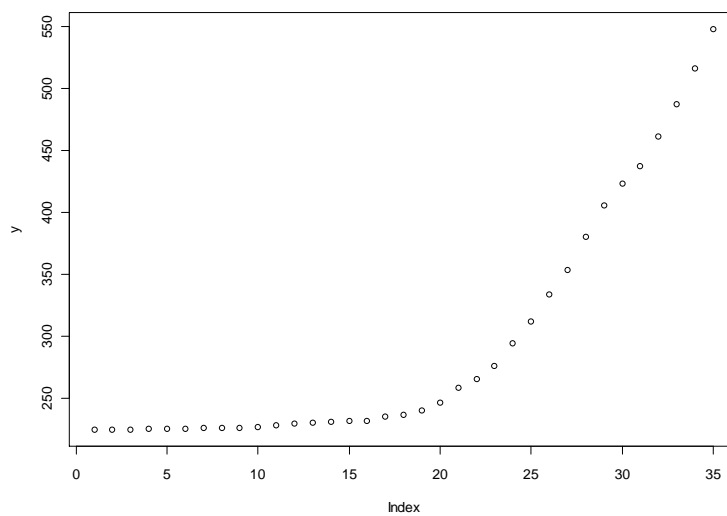
To demonstrate, we use the yearly data of Vietnam from 1969 to 2003. The data has been prepared in the following manner.

```
data=read.csv(file="vietnam.csv",head=TRUE,sep=",") # read in the data in CSV format
names(data) # display the names of the variables contained in the dataframe
summary(data) # produce summary statistics for each of the variables.
date=data$DATE # display the data of DATE
y0=data$RGDPCC # display the data of Real GDP Per Capita
tpn=length(y0) # total number of observations (T+n) n=5 # number of observation for
out-of-sample comparison
byr=date[1] #begining year # byr=1969
eyr=date[tpn] #ending year #eyr=2008
y=y0[1:(tpn-n)] # take a subsample from 1969 to 2003
ts_y=ts(y,start=c(byr),end=c(eyr-n),frequency=1) # convert to a time series object
```

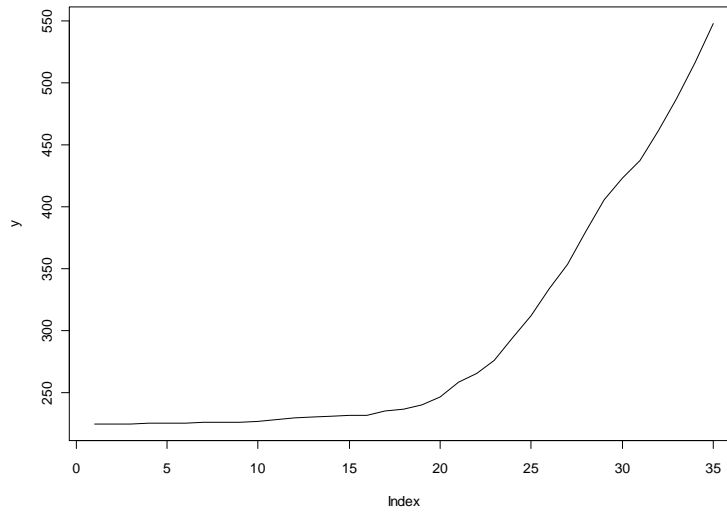
## 2. THE BASIC PLOT

The followings show how different commands and options will affect the plot.

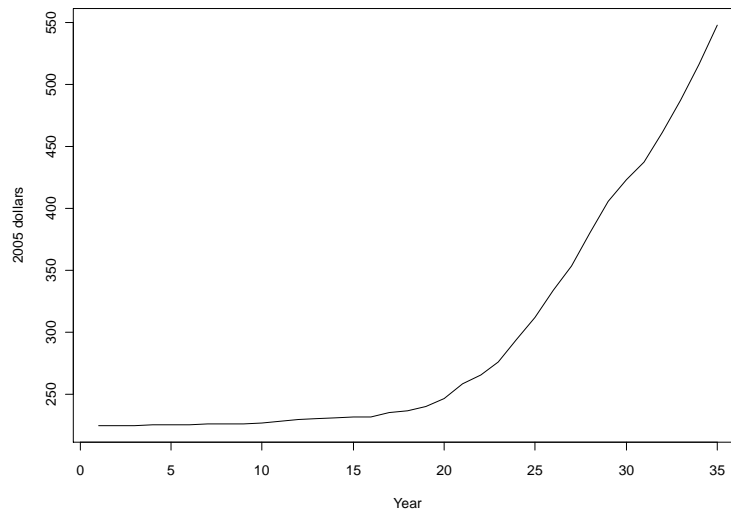
```
plot(y)
```



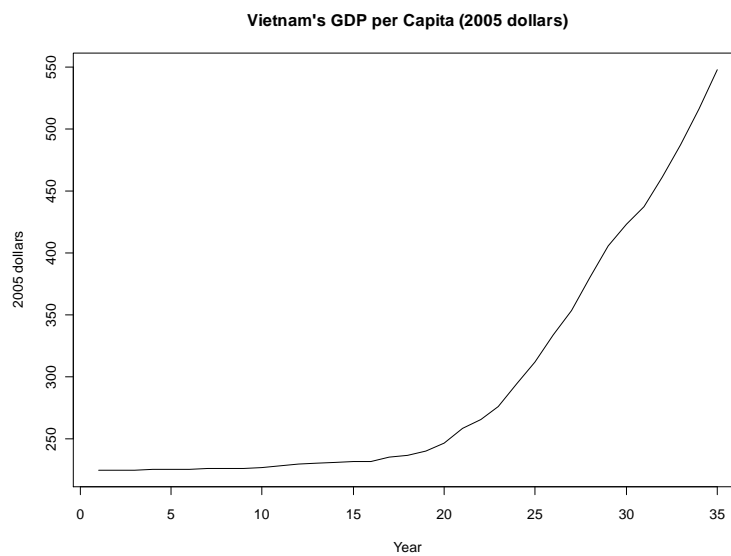
```
plot(y,type='l')
```



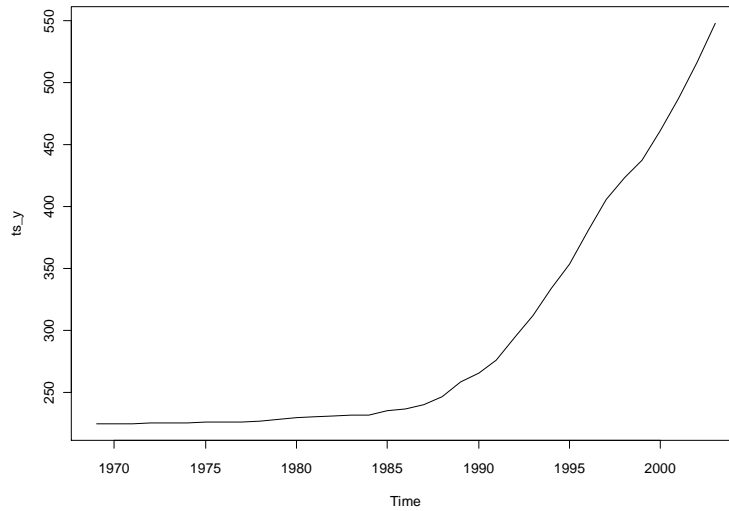
```
plot(y,type="l",xlab="Year",ylab="2005 dollars")
```



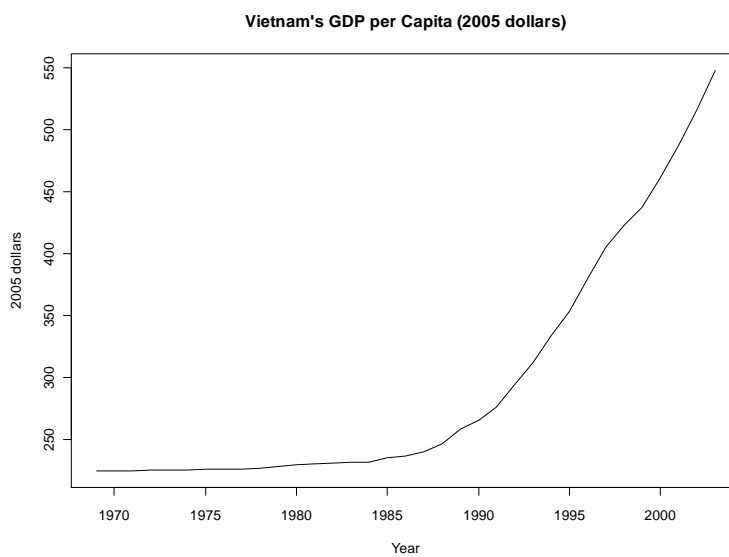
```
plot(y,type="l",xlab="Year",ylab="2005 dollars",main="Vietnam's GDP per Capita (2005 dollars)")
```



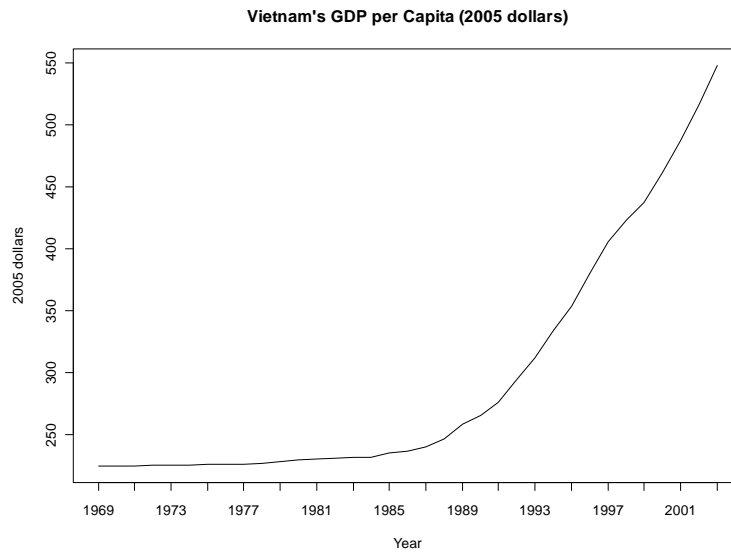
```
plot(ts_y)
```



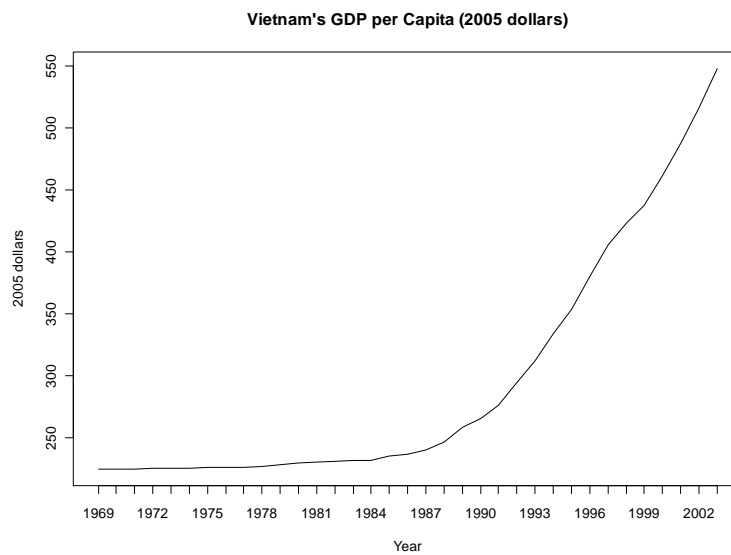
```
plot(ts_y,type="l",xlab="Year",ylab="2005 dollars",main="Vietnam's GDP per Capita (2005 dollars)")
```



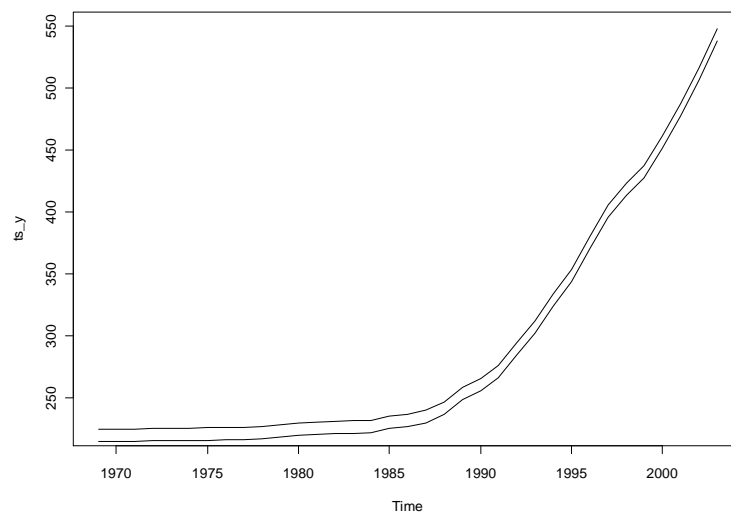
```
plot(ts_y,type="l",xlab="Year",ylab="2005 dollars",main="Vietnam's GDP per Capita (2005 dollars)",xaxp=c(1969,2003,(2003-1969)/2))
```



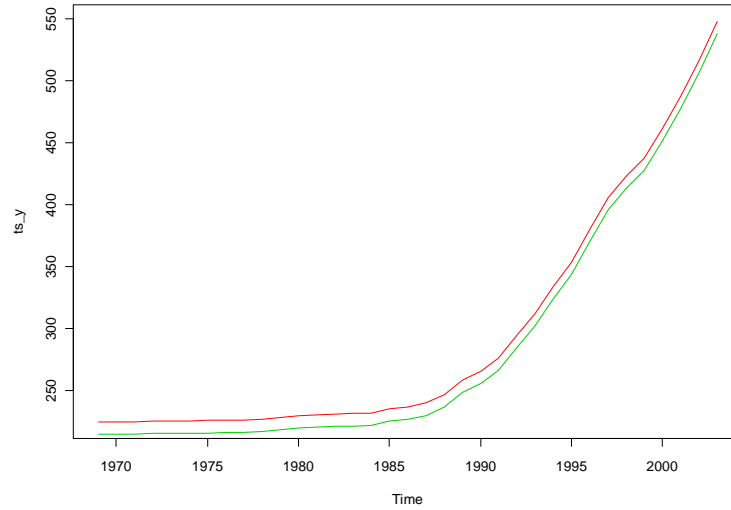
```
plot(ts_y,type="l",xlab="Year",ylab="2005 dollars",main="Vietnam's GDP per Capita (2005
dollars)",xaxp=c(1969,2003,(2003-1969)))
```



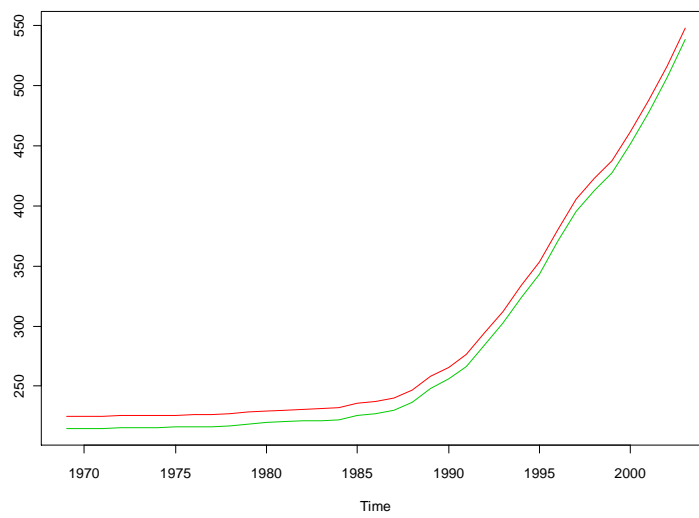
```
plot(ts_y)
lines(ts_y1)
```



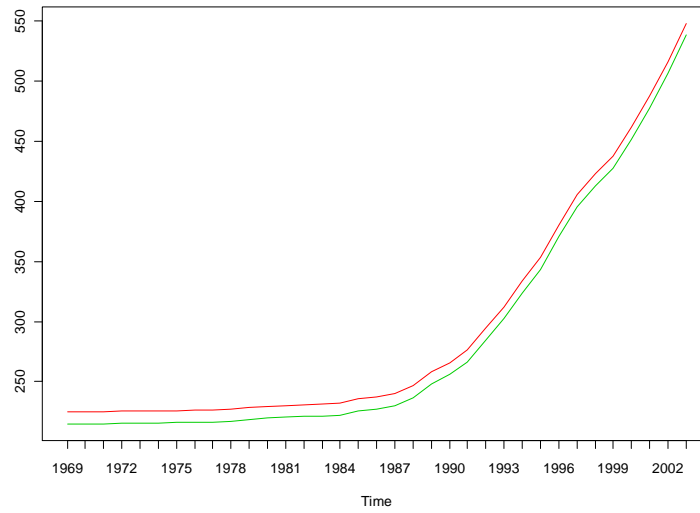
```
plot(ts_y,col=2)  
lines(ts_y1,col=3)
```



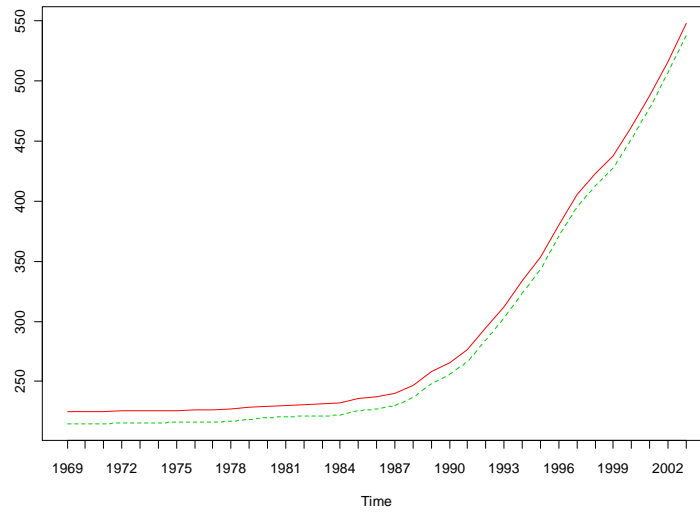
```
ts.plot(ts_y,ts_y1,col=c(2,3))
```



```
ts.plot(ts_y,ts_y1,col=c(2,3),gpars=list(xaxp=c(1969,2003,(2003-1969))))
```



```
ts.plot(ts_y,ts_y1,col=c(2,3),gpars=list(xaxp=c(1969,2003,(2003-1969)),lty=c(1,2)))
```



```
ts.plot(ts_y,ts_y1,gpars=list(xaxp=c(1969,2003,(2003-1969)),lty=c(1,2),col=c(2,3)))
```

