

1.

```
library(fBasics)
da=read.table("data/d-3stocks9908.txt", header=T)

returns = da[,2:4]

apply(returns*100, 2, basicStats)

log_returns = log(1+returns)

apply(log_returns*100, 2, basicStats)

apply(log_returns, 2, t.test)
|
```

2.

```
library(fBasics)
da=read.table("data/m-gm3dx7508.txt", header=T)

returns = da[,2:5]

apply(returns*100, 2, basicStats)

log_returns = log(1+returns)

apply(log_returns*100, 2, basicStats)

apply(log_returns, 2, t.test)
```

3.

```
library(fBasics)
da=read.table("data/m-gm3dx7508.txt", header=T)

returns = da[,5]
log_returns = log(1+returns)
annual_return = mean(log_returns)*12
cat("Annual Log Return =", annual_return, "\n")

value = exp(annual_return*34)
cat("Investment Value = $", value, "\n")
|
```

4.

```
library(fBasics)
da=read.table("data/d-3stocks9908.txt", header=T)

returns = da[,2]
log_returns = log(1+returns)
t1 = skewness(log_returns)/ sqrt(6/length(log_returns))
cat("Test statistic =", t1, "\n")

t2 = kurtosis(log_returns)/ sqrt(24/length(log_returns))
cat("Test statistic =", t2, "\n")
```