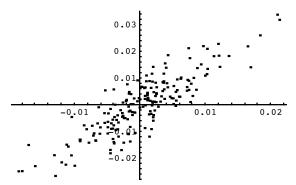
```
"HET", "HMC", "IBM", "ILMN", "LUX", "ORCL", "PNRA", "SGMS", "SIRI",
    "SNDK", "STEM", "STX", "TM", "TMTA", "TPX", "TYC", "VLO", "XMSR", "YHOO"},
   {70, 30, 24, 50, 50, 50, 10, 50, 48, 30, 75, 20, 100, 50, 40, 40,
    50, 200, 25, 250, 100, 15, 40, 200, 20, 50, 50, 40}};
sure // MatrixForm
 AAPL AFFX BRCM DLB FIC GILD GOOG GTRC HANS HET HMC IBM ILMN LUX ORCL PNRA SGMS
70
                                                    75 20 100 50 40
                  50 50 50
      30
            24
                                10
                                      50
                                           48
                                                 30
                                                                              40
                                                                                   50
begin = "&a=00&b=1&c=2006";
end = "&d=09&e=12&f=2006";
AbsoluteTiming[
 quotes = Table[Rest[Import["http://ichart.finance.yahoo.com/table.csv?s=" <>
        sure[[1, i]] <> begin <> end <> "&g=d&ignore=.csv"]], {i, Length[sure[[1]]]}];
1
{12.5480432 Second, Null}
index = Rest[Import["http://ichart.finance.yahoo.com/table.csv?s=^GSPC" <>
     begin <> end <> "g=d&ignore=.csv"]];
headings = {"Date", "Open", "High", "Low", "Close", "Volume", "Adj. Close*"};
quotes[[1, 1]]
{11-Oct-06, 73.42, 73.98, 72.6, 73.23, 20423400, 73.23}
Total[Table[sure[[2, i]] * quotes[[i, 1, 7]], {i, Length[quotes]}]]
51641.9
pval = Table[Total[Table[sure[[2, i]] * quotes[[i, j, 7]], {i, Length[quotes]}]],
   {j, Length[quotes[[1]]]}];
pNormTime = (Reverse[pval] / pval[[-1]]);
ListPlot[pNormTime, PlotJoined → True];
1.075
1.02
0.975
<< Graphics`
index[[-1, 7]]
1268.8
```

sure = {{"AAPL", "AFFX", "BRCM", "DLB", "FIC", "GILD", "GOOG", "GTRC", "HANS",

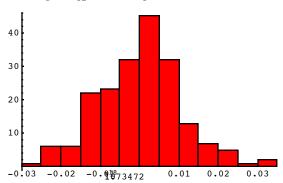
-0.02

```
iNormTime = (Reverse[index[[All, 7]]] / index[[-1, 7]]);
MultipleListPlot[pNormTime, iNormTime,
   PlotJoined → True, PlotStyle → {Red, Blue}, SymbolShape → None];
1.075
1.05
1.025
0.975
 0.95
preturns = Table \Big[ Log \Big[ pval [[i]] / pval [[i+1]] \Big], \{i, Length [pval] - 1\} \Big];
ireturns = Table [Log[index[[i, 7]] / index[[i+1, 7]]], {i, Length[index] - 1}];
General::spell1 : Possible spelling error: new
   symbol name "ireturns" is similar to existing symbol "preturns". More...
ListPlot[preturns];
 0.03
 0.02
 0.01
-0.01
-0.02
MultipleListPlot[preturns, ireturns, SymbolStyle → {Red, Blue}];
0.03
 0.02
 0.01
-0.01
```

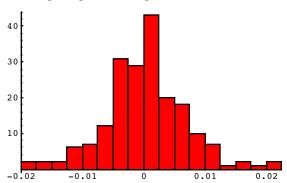
ListPlot[Transpose[{ireturns, preturns}]];



## Histogram[preturns];

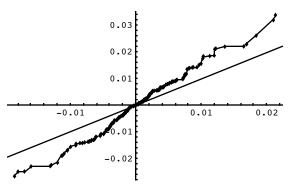


## Histogram[ireturns];



<< Statistics`

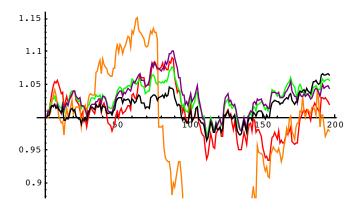
QuantilePlot[ireturns, preturns, PlotJoined → True];



```
Correlation[Rest[preturns], Most[preturns]]
0.0785843
Correlation[preturns, ireturns]
{Mean[preturns], StandardDeviation[preturns]}
{0.0001022, 0.0107928}
{250 Mean[preturns], Sqrt[250] StandardDeviation[preturns]}
{0.0255499, 0.17065}
{250 Mean[ireturns], Sqrt[250] StandardDeviation[ireturns]}
{0.079482, 0.104789}
mco = Rest[Import[
     "http://ichart.finance.yahoo.com/table.csv?s=MCO&a=00&b=1&c=2006&d=09&e=12&f=
       2006&g=d&ignore=.csv"]];
mcoNormTime = (Reverse[mco[[All, 7]]] / mco[[-1, 7]]);
ListPlot[mcoNormTime, PlotJoined → True];
1.15
1.1
1.05
                   100
0.95
0.9
0.85
0.8
spc = {{"FBIDX", "FDIVX", "NBGEX", "RIMSX"}, {193, 108, 50, 43}};
AbsoluteTiming[
 quotesSPC = Table[Rest[Import["http://ichart.finance.yahoo.com/table.csv?s=" <>
        spc[[1, i]] <> "&a=00&b=1&c=2006&d=09&e=12&f=2006&g=d&ignore=.csv"]],
     {i, Length[spc[[1]]]}];
1
{1.5322032 Second, Null}
f = {{"F", "FCNTX", "FDCAX", "FDGFX", "FOSFX", "FRESX", "NBGIX", "OAKLX",
     "PTRAX", "RYLPX"}, {444, 90, 156, 165, 106, 173, 96, 163, 360, 355}};
```

```
AbsoluteTiming[
 quotesF = Table[Rest[Import["http://ichart.finance.yahoo.com/table.csv?s=" <>
         f[[1, i]] <> "&a=00&b=1&c=2006&d=09&e=12&f=2006&g=d&ignore=.csv"]],
     {i, Length[f[[1]]]}];
1
General::spell1 : Possible spelling error: new
   {\tt symbol} name "quotesF" is similar to existing {\tt symbol} "quotes". More...
{3.8855872 Second, Null}
fval = Table[Total[Table[f[[2, i]] * quotesF[[i, j, 7]], {i, Length[quotesF]}]],
    {j, Length[quotesF[[1]]]}];
General::spell1 :
 Possible spelling error: new symbol name "fval" is similar to existing symbol "pval". More...
fNormTime = (Reverse[fval] / fval[[-1]]);
General::spell: Possible spelling error: new symbol name
   "fNormTime" is similar to existing symbols {iNormTime, pNormTime}. More...
spcval =
  Table[Total[Table[spc[[2, i]] * quotesSPC[[i, j, 7]], {i, Length[quotesSPC]}]],
    {j, Length[quotesSPC[[1]]]}];
spcNormTime = (Reverse[spcval] / spcval[[-1]]);
mcoval = mco[[All, 7]] * 183;
tot = pval + fval + spcval + mcoval;
totNormTime = (Reverse[tot] / tot[[-1]]);
ListPlot[totNormTime, PlotJoined → True];
1.08
1.06
1.04
0.98
0.96
0.94
```

MultipleListPlot[pNormTime, fNormTime, mcoNormTime, spcNormTime, iNormTime,  $PlotJoined \rightarrow True$ ,  ${\tt SymbolShape} \rightarrow {\tt None}, \ {\tt PlotStyle} \rightarrow \{{\tt Red}, \ {\tt Green}, \ {\tt Orange}, \ {\tt Purple}, \ {\tt Black}\}] \ ;$ 



MultipleListPlot[totNormTime, iNormTime,  ${\tt PlotJoined} \rightarrow {\tt True, SymbolShape} \rightarrow {\tt None, PlotStyle} \rightarrow \{{\tt Red, Black}\}];$ 

