

GRAPHIC ERA HILL

UNIVERSITY DEHRADUN

Name - Rahul Singh Rawat

Roll NO. - 21561011

Enrolment no. - PV-21010158

Course - MCA sem-I

Section - A

Subject - Scripting language
~~ETMC-106~~

- R programming ~~ETMC-~~

Subject Code - PMC 103.

Rahul

PHP REGISTRATION FORM EXAMPLE

Date ▼Year ▼

Enter Name

Enter name

Enter Coustomer No

Enter Number

Enter your Mobile Number

Enter number

REGISTER

RESET

Activate Windows
Go to Settings to activate Windows.

Ans-1-

<html>

<head>

<title> PNP Customer </title>

<style>

{

padding : 0 ;

margin : 0 ;

}

body {

margin : 50px auto ;

}

input {

border : 3px solid ;

color : blue ;

display : block

}

form {

margin : 20px auto ;

padding : 20px ;

border : 5px solid ;

}

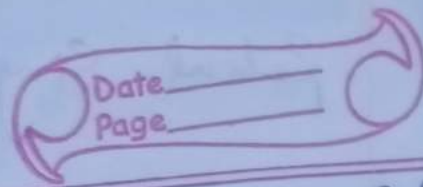
h1 {

display : block ;

font size : 2rem ;

}

Rahul Singh Raneat
21561011



input [type = submit] {

Rahul

border : 3px Solid ;

Color : Blue ;

font-weight : Bold ;

</style>

</head>

<body>

<h1> PHP Registration form </h1>

<form method = "post" enctype

= "multipart/form-data"

action = "?#?" >

<table>

<tr>

<td colspan = "2" > <date> </td>

</tr>

<tr>

<td width = "159" >

Enter Name </td>

<td width = "218" >

Pahul Singh, Ramat

21561011

Pahul

Date: _____

Page: _____

```
<input type="text" placeholder="enter name" ></td>
```

```
</tr>
```

```
<tr>
```

```
<td> <b> Enter Customer no</b> </td>
```

```
</tr>
```

```
<?php
```

```
for($i; $i <= 12; $i++)  
{
```

```
echo "Option value = '$i' . $i.  
" <option>";
```

```
}
```

```
??
```

```
</select>
```

```
<select name="dd">
```

```
<option value="">
```

```
Date </option>
```

```
<?ph
```

```
for($i=1; $i <= 31; $i++)
```

```
{
```

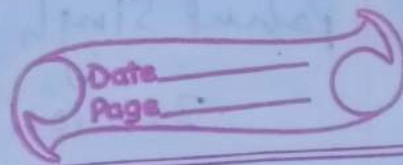
```
echo "Option value = '$i' .  
$i . " <option>";
```

```
}
```

```
??
```

```
</select>
```


Rahul Singh Rana
21561011



Rahul

<select name = "yy">

<option value = ""> year
</option>

<?php

for (\$i = 1900; \$i <= 2015; \$i++)

{
echo "Option value = \"\$i\">\". \$i."
</option>";

}

?>

</select>

</td>

<tr>

<td colspan = "2" align = "center">

<input type = "Submit" name
= "save" >

</td>

</tr>

</table>

</form>

</body>

</html>

Rahul Singh Chauhan

21561011

Date _____

Page _____

Ans 2

R programming.

Rahul

```
install.packages("ggplot2")
```

```
install.packages("quantmod")
```

```
getSymbols("TTM", src = "yahoo")
```

```
library(quantmod)
```

```
library(dplyr)
```

```
head(TTM)
```

```
tail(TTM)
```

```
class(TTM)
```

```
TTM
```

```
TTM <- data.frame(TTM)
```

```
TTM
```

```
Summary(TTM)
```

```
dim(TTM)
```

```
names(TTM)
```

```
str(TTM)
```

```
typeof(TTM)
```

```
plot.ts(TTM[, TTM.volume])
```

```
plot.ts(TTM[, TTM.close])
```

```
line.chart(TTM, line.type =
```

```
'h', theme = "white")
```

```
TA = ATR
```


fehuf

basket-Symbols <- c('PG', 'F', 'HMC')

getSymbols(basket-Symbols, src='yahoo')

head(f)

tail(f)

head(HMC)

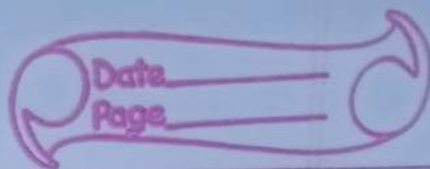
tail(HMC)

bucket-Symbols <- table(basket-Symbols)

pie(bucket-Symbols.col = c("red",
"green", "blue"))

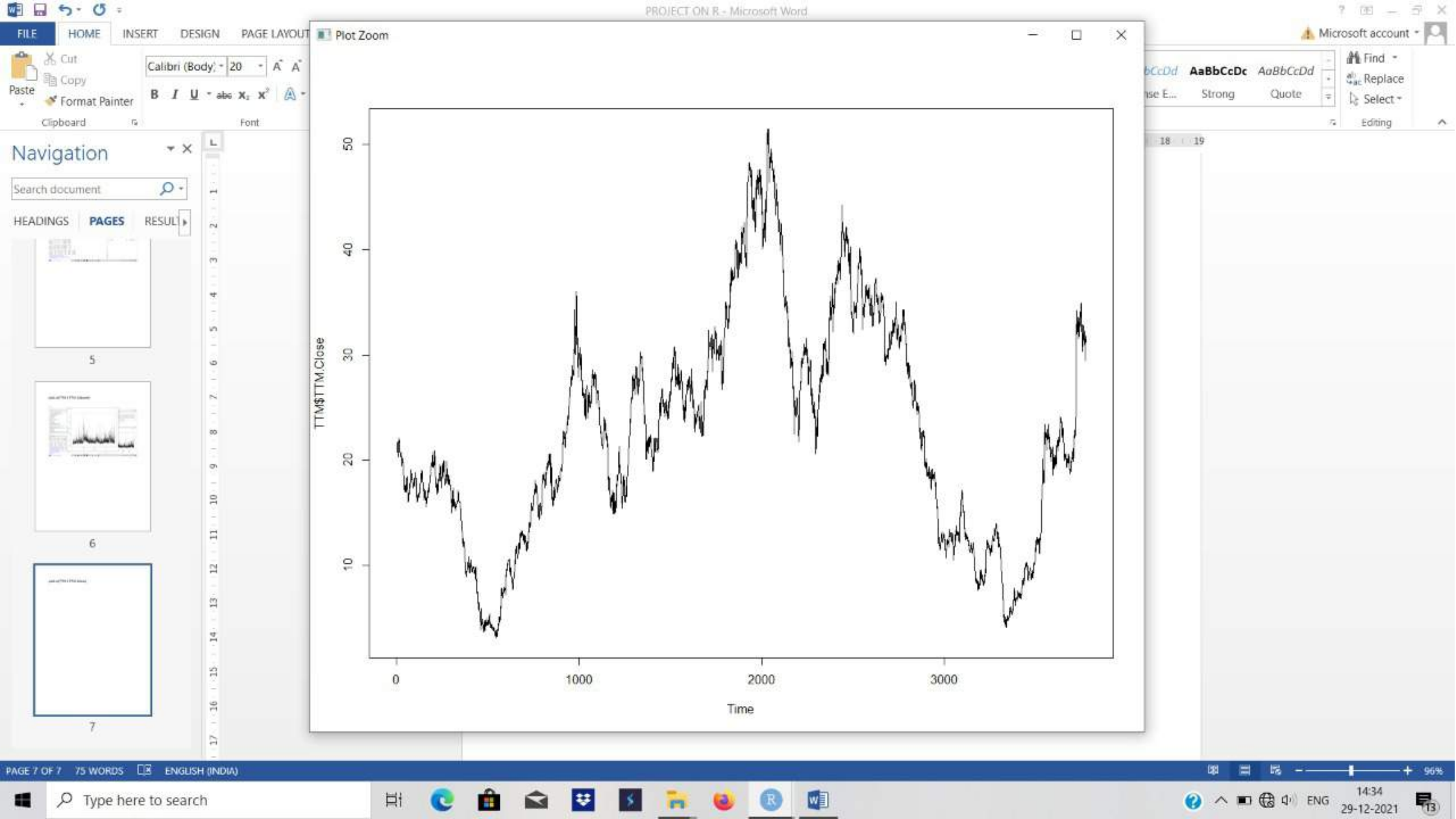
barplot(bucket-Symbols.col = (
'purple', 'blue', 'yellow'))

Fahul



Am-4 -

- * operation income during the year fell 4.3% on a year-on-year (YOY) basis.
- * The company's operating profit increased by 15.5% YOY during the fiscal. Operating profit margins witnessed a fall and down at 6.8% in FY21 as against 5.7% in FY20.
- * other income grew by 24.2% YOY
- * Net profit margins during the year declined from 4.2% in FY20 to 5.1% in FY21.




```

1 install.packages("ggplot2")
2 install.packages("quantmod")
3 getSymbols('TTM',src='yahoo')
4 library(quantmod)
5 library(dplyr)
6 head(TTM)
7 tail(TTM)
8 class(TTM)
9 TTM
10 TTM<-data.frame(TTM)
11 TTM
12 summary(TTM)
13 dim(TTM)
14 names(TTM)
15 str(TTM)
16 typeof(TTM)
17 plot.ts(TTM$ TTM.volume)
18 plot.ts(TTM$ TTM.close)
19
20 linechart(TTM,line.type='h',theme='white',TA=NU)
21 barchart(TTM,bar.type='hlc')
22 basket_symbols<-c('PG','F','HMC')
23 getSymbols(basket_symbols,src='yahoo')
24 head(F)
25 tail(F)
26 head(HMC)
27 tail(HMC)
28 bucket_symbols<-table(basket_symbols)
29 pie(bucket_symbols,col=c("red","green","blue"))
30 barplot(bucket_symbols,col=c('purple','blue','yellow'))
31

```

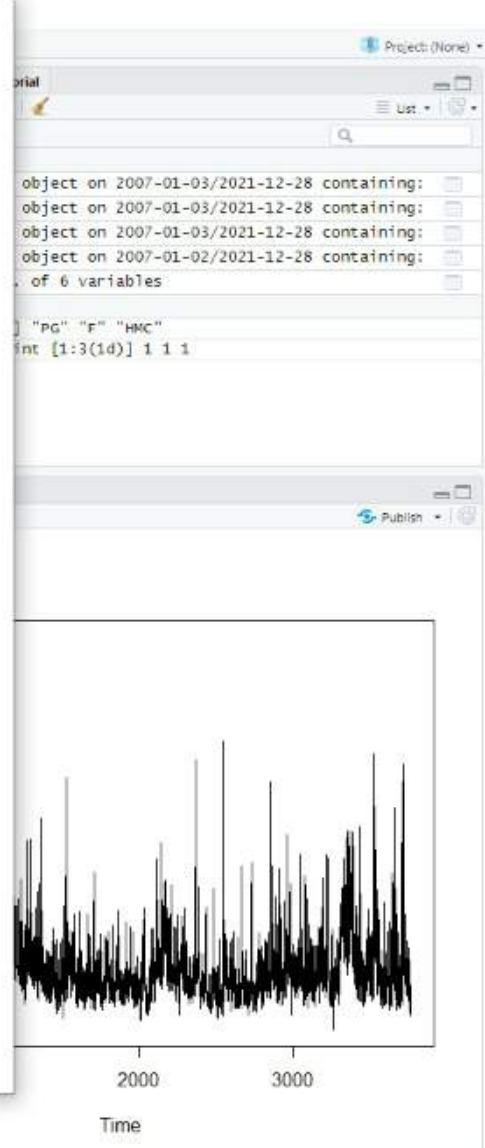
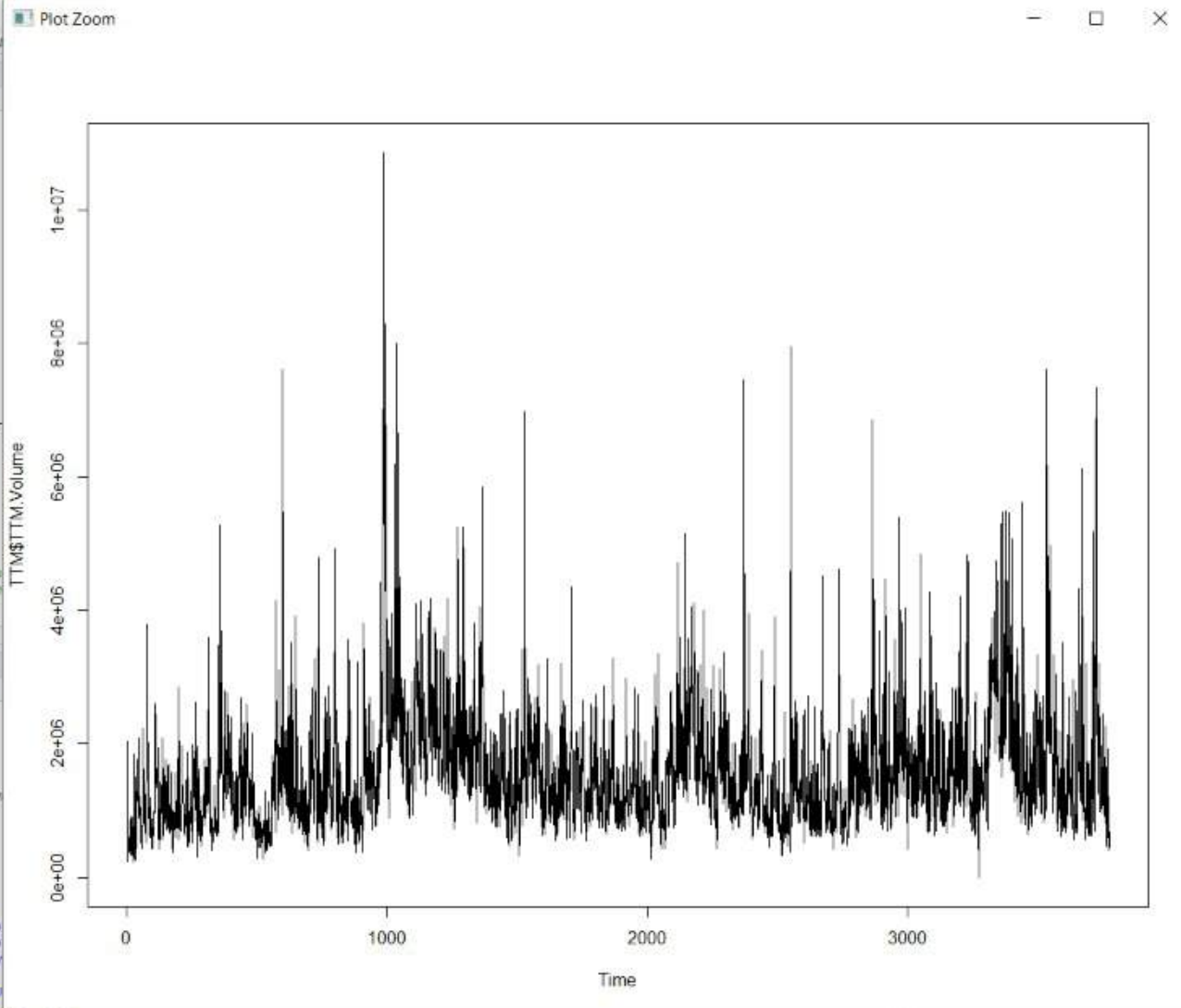
17/17 (Top Level)

Console Terminal Jobs

```

R 4.1.1
2021-12-22 19.64 20.34 19.64 20.14 75806400
2021-12-23 20.08 20.41 20.00 20.25 50516400
2021-12-27 20.26 20.89 20.10 20.80 59651800
2021-12-28 20.66 21.06 20.59 20.76 52787100
> head(HMC)
HMC.open HMC.High HMC.Low HMC.Close HMC
2007-01-03 39.81 40.03 39.50 39.71
2007-01-04 39.65 40.15 39.50 40.04
2007-01-05 38.92 38.92 38.36 38.67
2007-01-08 38.73 39.13 38.62 38.89
2007-01-09 38.91 38.95 38.64 38.91
2007-01-10 38.30 38.30 37.62 37.94
> bucket_symbols<-table(basket_symbols)
> pie(bucket_symbols,col=c("red","green","blue"))
> pie(bucket_symbols,col=c("red","green","blue"))
> barplot(bucket_symbols,col=c('purple','blue','yellow'))
> barchart(TTM,bar.type='hlc')
> linechart(TTM,line.type='h',theme='white',TA=NU)
> barchart(TTM,bar.type='hlc')
> barplot(bucket_symbols,col=c('purple','blue','yellow'))
> plot.ts(TTM$ TTM.volume)
> head(DATA)

```



RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Source

```
R 4.1.1
> head
      2007-01-05 2007-01-08 2007-01-09
TCS.NS.open 316.250 314.750 311.975
TCS.NS.high 317.1500 314.7500 315.4625
TCS.NS.low 313.2750 303.7500 306.3125
TCS.NS.close 315.7500 310.9500 314.1000
TCS.NS.volume 2718740 4951892 4020568
TCS.NS.adjusted 239.6857 236.0419 238.4330

> head
      2007-01-05 2007-01-08 2007-01-09
PG.open 63.72 63.39 63.27
PG.high 64.66 63.80 64.33
PG.low 63.70 63.11 63.25
PG.close 64.54 63.48 64.24
PG.volume 9717900 10823800 8139400
PG.adjusted 41.58997 40.90691 41.39666

> head
      2007-01-03 2007-01-04 2007-01-05 2007-01-08 2007-01-09 2007-01-10
HMC.open 39.81 39.65 38.92 38.73 38.91 38.30
HMC.high 40.03 40.15 38.92 39.13 38.95 38.30
HMC.low 39.50 39.50 38.36 38.62 38.64 37.62
HMC.close 39.71 40.04 38.67 38.89 38.91 37.94
HMC.volume 458100 421700 782900 427700 228600 591500
HMC.adjusted 38.47189 38.79160 37.46432 37.67746 37.69684 36.75708

> bucket_symbols<-table(bucket_symbols)
> pie(bucket_symbols,col=c("red","green","blue"))
> pie(bucket_symbols,col=c("red","green","blue"))
> barplot(bucket_symbols,col=c("purple","blue","yellow"))
> head(TCS.NS)
```

Environment History Connections Tutorial

Import Dataset 262 MB

R Global Environment

Data

F	An 'xts' object on 2007-01-03/2021-12-28 containi...
HMC	An 'xts' object on 2007-01-03/2021-12-28 containi...
PG	An 'xts' object on 2007-01-03/2021-12-28 containi...
TCS.NS	An 'xts' object on 2007-01-02/2021-12-28 containi...
TTM	3773 obs. of 6 variables

values

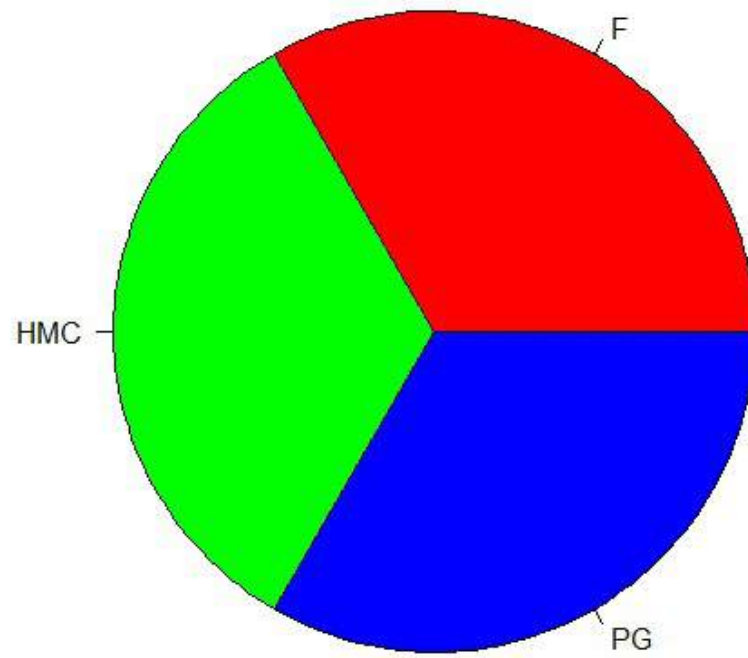
bucket_symbols	chr [1:3] "PG" "F" "HMC"
bucket_symbols	'table' int [1:3(1d)] 1 1 1

Files Plots Packages Help Viewer

New Folder Delete Rename More

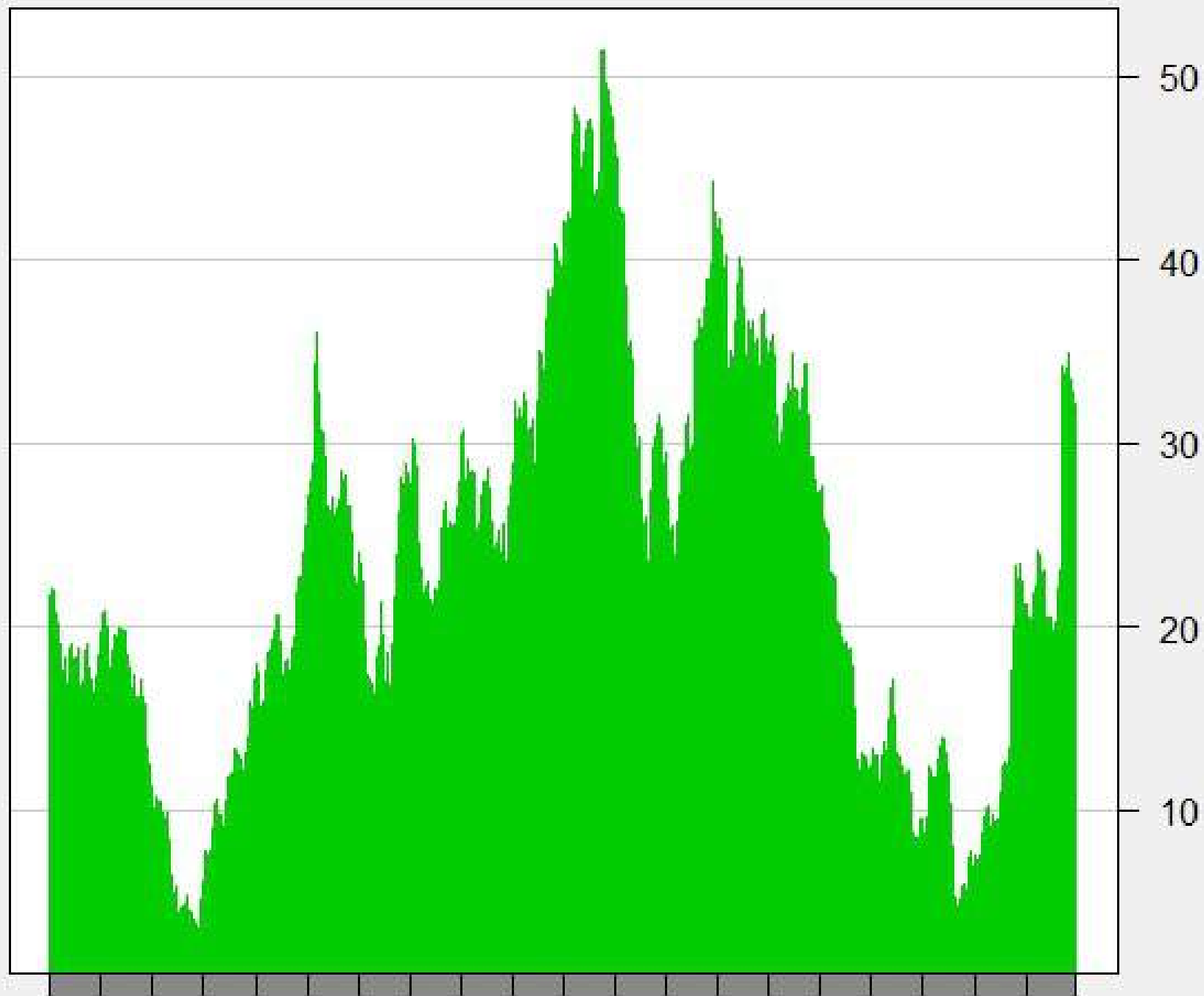
F DATA

Name	Size	Modified
RData	81.3 KB	Dec 28, 2021, 11:58 PM
.Rhistory	1.3 KB	Dec 28, 2021, 11:58 PM
R.project.R	331 B	Dec 28, 2021, 11:58 PM
TTM.csv.csv	83.4 KB	Dec 28, 2021, 10:50 PM



TTM

[2007-01-03/2021-12-27]



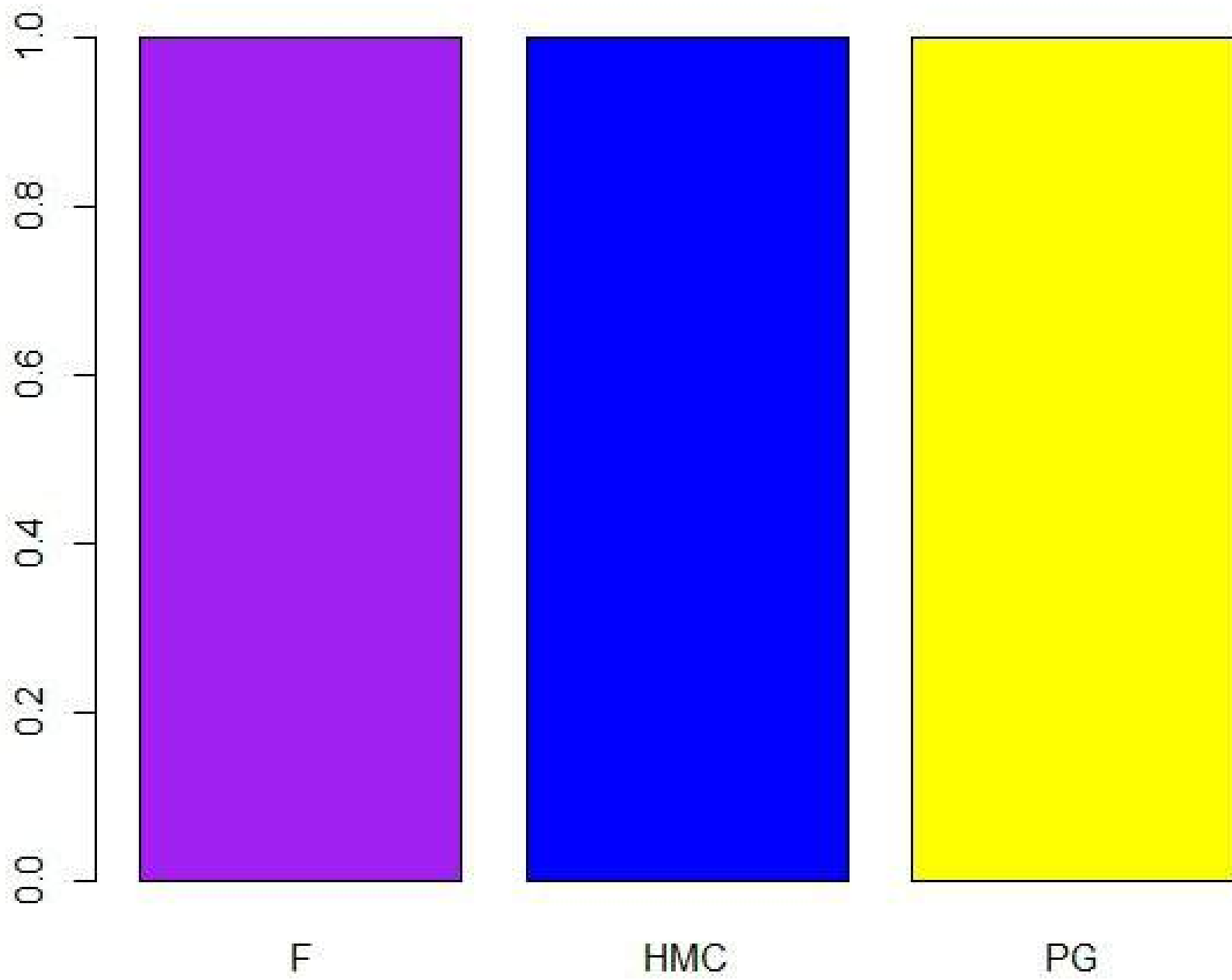
Jan 03 2007

Oct 01 2010

Jul 01 2014

Apr 02 2018

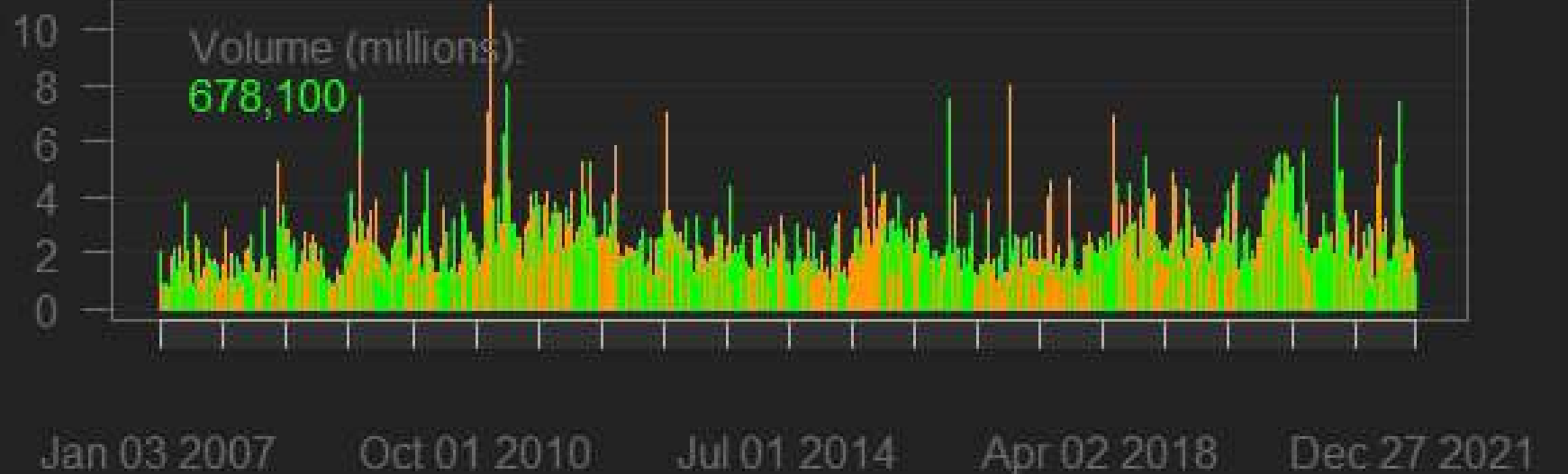
Dec 27 2021



TTM

[2007-01-03/2021-12-27]

Last 31.780001




```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins

Source
Console Terminal Jobs
R 4.1.1
2007-07-19 19.02 19.17 18.80 19.09 2094000 17.17037
2007-07-20 18.95 18.95 18.34 18.67 1204500 16.79847
2007-07-23 19.00 19.00 18.82 18.91 729200 17.01441
2007-07-24 18.67 18.73 18.21 18.22 622100 16.39358
2007-07-25 18.29 18.29 17.74 18.15 782800 16.33059
2007-07-26 17.83 17.94 17.35 17.73 1371600 15.95270
2007-07-27 17.48 17.70 17.10 17.28 903900 15.54781
2007-07-30 17.51 17.76 17.40 17.74 814100 15.96169
2007-07-31 17.96 18.02 17.15 17.15 1515100 15.43084
2007-08-01 16.81 16.99 16.59 16.97 869800 15.26888
2007-08-02 16.50 16.60 16.20 16.45 1759900 14.80101
2007-08-03 16.50 16.65 16.01 16.16 1274800 14.54008
2007-08-06 16.35 16.59 16.18 16.50 1144600 14.84600
2007-08-07 16.58 16.66 16.36 16.50 717500 14.84600
2007-08-08 16.56 16.80 16.50 16.68 1031600 15.00795
2007-08-09 16.49 16.70 16.30 16.38 1031600 14.73802
2007-08-10 16.22 16.90 16.20 16.76 1420800 15.07994
2007-08-13 17.05 17.33 16.91 17.16 1120300 15.43984
2007-08-14 17.28 17.31 16.75 16.95 743500 15.25089
2007-08-15 16.76 17.00 16.50 16.51 812600 14.85499
2007-08-16 16.25 16.40 15.74 16.18 1673900 14.55808
2007-08-17 16.40 17.06 16.12 16.53 1563700 14.87299
2007-08-20 16.30 16.30 15.95 16.21 1295500 14.58507
2007-08-21 15.63 15.75 15.45 15.60 1701300 14.03622
2007-08-22 15.49 15.77 15.26 15.77 1571400 14.18917
2007-08-23 15.65 15.71 15.50 15.56 692900 14.00022
2007-08-24 15.93 16.47 15.87 16.45 1082100 14.80101
2007-08-27 16.50 16.57 16.30 16.31 664000 14.67504
2007-08-28 16.30 16.30 15.80 15.90 718600 14.30614
2007-08-29 16.35 16.44 16.21 16.43 783400 14.78301
[reached 'max' / getoption("max.print") -- omitted 3607 rows]
> summary(TTM)
      TTM.open      TTM.High      TTM.Low      TTM.Close      TTM.volume      TTM.Adjusted
min.   : 3.17   min.   : 3.41   min.   : 3.05   min.   : 3.14   min.   : 0       min.   : 2.908
1st Qu.:14.87   1st Qu.:15.06   1st Qu.:14.60   1st Qu.:14.93   1st Qu.: 971300   1st Qu.:14.009
Median :21.83   Median :22.10   Median :21.57   Median :21.90   Median :1382300   Median :21.430
Mean   :22.75   Mean   :22.99   Mean   :22.48   Mean   :22.74   Mean   :1595416   Mean   :22.303
3rd Qu.:30.10   3rd Qu.:30.43   3rd Qu.:29.76   3rd Qu.:30.10   3rd Qu.:1949500   3rd Qu.:29.860
Max.   :51.26   Max.   :51.80   Max.   :50.65   Max.   :51.47   Max.   :10859100   Max.   :51.449
> dim(TTM)
[1] 3773 6
> names(TTM)
[1] "TTM.open" "TTM.High" "TTM.Low" "TTM.Close" "TTM.volume" "TTM.Adjusted"
> str(TTM)
'data.frame': 3773 obs. of 6 variables:
 $ TTM.open : num 21.2 21.6 20.9 21.2 20.8 ...
 $ TTM.High : num 21.7 21.6 21.1 21.2 20.8 ...
 $ TTM.Low : num 20.9 21.3 20.8 20.6 20.5 ...
 $ TTM.Close : num 21.7 21.6 20.9 20.9 20.5 ...
 $ TTM.volume : num 2038200 745300 663300 241900 462900 ...
 $ TTM.Adjusted: num 19.1 19 18.4 18.4 18.1 ...
> typeof(TTM)
[1] "list"
> plot.ts(TTM$ TTM.volume)
> plot.ts(TTM$ TTM.Close)
> barplot(TTM,x=time,y=close)
Error in barplot.default(TTM, x = time, y = close) :
  argument 2 matches multiple formal arguments
```

Environment History Connections Tutorial
R | Global Environment
Data
F An 'xts' object on 2007-01-03/2021-12-28 containing:
HMC An 'xts' object on 2007-01-03/2021-12-28 containing:
PG An 'xts' object on 2007-01-03/2021-12-28 containing:
TCS.N5 An 'xts' object on 2007-01-02/2021-12-28 containing:
TTM 3773 obs. of 6 variables
Values
basket_symbols chr [1:3] "PG" "F" "HMC"
bucket_symbols 'table' int [1:3(1d)] 1 1 1

Files Plots Packages Help Viewer
New Folder Delete Rename More
DATA
Name Size Modified
RData 81.3 KB Dec 28, 2021, 11:58 PM
Rhistory 1.3 KB Dec 28, 2021, 11:58 PM
R.project.R 331 B Dec 28, 2021, 11:58 PM
TTM.csv.csv 83.4 KB Dec 28, 2021, 10:50 PM

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Source

Console Terminal Jobs

```
R 4.1.1 > load("F:/DATA/.Rdata")
>
> install.packages("ggplot2")
WARNING: Rtools is required to build R packages but is not currently installed. Please download and install the appropriate version of Rtools before proceeding:
https://cran.rstudio.com/bin/windows/Rtools/
Installing package into 'c:/Users/Nicks/Documents/R/win-library/4.1'
(as 'lib' is unspecified)
trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.1/ggplot2_3.3.5.zip'
Content type 'application/zip' length 4129603 bytes (3.9 MB)
downloaded 3.9 MB

package 'ggplot2' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
c:/Users/Nicks/AppData/Local/Temp/RtmpQF9wDE/downloaded_packages
> install.packages('quantmod')
WARNING: Rtools is required to build R packages but is not currently installed. Please download and install the appropriate version of Rtools before proceeding:
https://cran.rstudio.com/bin/windows/Rtools/
Installing package into 'c:/Users/Nicks/Documents/R/win-library/4.1'
(as 'lib' is unspecified)
trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.1/quantmod_0.4.18.zip'
Content type 'application/zip' length 1031846 bytes (1007 KB)
downloaded 1007 KB

package 'quantmod' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
c:/Users/Nicks/AppData/Local/Temp/RtmpQF9wDE/downloaded_packages
> getsymbols('TTM',src='yahoo')
Error in getsymbols("TTM", src = "yahoo") :
  could not find function "getsymbols"
> library(quantmod)
Loading required package: xts
Loading required package: zoo

Attaching package: 'zoo'

The following objects are masked from 'package:base':
  as.Date, as.Date.numeric

Loading required package: TTR
Registered 53 method overwritten by 'quantmod':
  method from
  as.zoo.data.frame zoo
Warning messages:
1: package 'quantmod' was built under R version 4.1.3
2: package 'xts' was built under R version 4.1.2
3: package 'zoo' was built under R version 4.1.2
4: package 'TTR' was built under R version 4.1.2
> library(dplyr)

Attaching package: 'dplyr'
```

Environment History Connections Tutorial

Import Dataset 115 MB

R Global Environment

Data

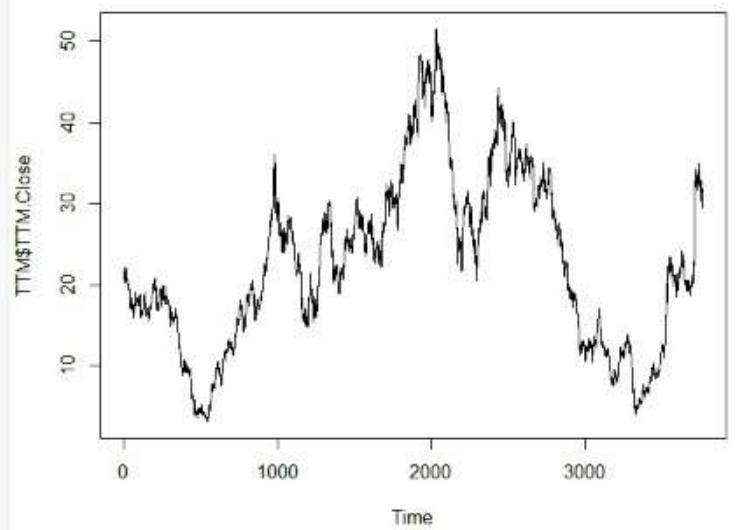
F	An 'xts' object on 2007-01-03/2022-03-14 containing:
HMC	An 'xts' object on 2007-01-03/2022-03-14 containing:
PG	An 'xts' object on 2007-01-03/2022-03-14 containing:
TTM	3773 obs. of 6 variables

Values

basket_symbols	chr [1:3] "PG" "F" "HMC"
bucket_symbols	'table' int [1:3(1d)] 1 1 1

Files Plots Packages Help Viewer

Zoom Export Publish



Type here to search

09:39 15-03-2022

Source

Console Terminal Jobs

R 4.1.1

```
> head(TTM)
      TTM.open TTM.High TTM.Low TTM.Close TTM.volume TTM.Adjusted
2007-01-03    20.95    21.69    20.93    21.69    2038200    19.12708
2007-01-04    21.60    21.62    21.30    21.60    745300    19.04772
2007-01-05    20.92    21.10    20.77    20.86    663300    18.39516
2007-01-08    20.99    20.99    20.62    20.86    241900    18.39516
2007-01-09    20.83    20.84    20.45    20.53    462900    18.10415
2007-01-10    20.50    20.50    20.13    20.31    451600    17.91014
> tail(TTM)
      TTM.open TTM.High TTM.Low TTM.Close TTM.volume TTM.Adjusted
2021-12-17    30.16    30.77    30.03    30.31    1178100    30.31
2021-12-20    29.24    29.57    28.87    29.47    1214400    29.47
2021-12-21    29.88    30.43    29.88    30.38    686400    30.38
2021-12-22    30.93    31.52    30.89    31.50    404900    31.50
2021-12-23    31.16    31.42    31.10    31.21    480300    31.21
2021-12-27    31.19    31.79    31.16    31.78    678100    31.78
> class(TTM)
[1] "data.frame"
> TTM
      TTM.open TTM.High TTM.Low TTM.Close TTM.volume TTM.Adjusted
2007-01-03    20.95    21.69    20.93    21.69    2038200    19.12708
2007-01-04    21.60    21.62    21.30    21.60    745300    19.04772
2007-01-05    20.92    21.10    20.77    20.86    663300    18.39516
2007-01-08    20.99    20.99    20.62    20.86    241900    18.39516
2007-01-09    20.83    20.84    20.45    20.53    462900    18.10415
2007-01-10    20.50    20.50    20.13    20.31    451600    17.91014
2007-01-11    20.60    21.10    20.59    21.10    591600    18.60680
2007-01-12    21.49    21.69    21.22    21.42    539000    18.88899
2007-01-16    21.74    22.10    21.65    22.10    641700    19.48864
2007-01-17    21.95    22.10    21.75    22.10    467200    19.48864
2007-01-18    21.85    21.97    21.53    21.93    850100    19.33873
2007-01-19    21.70    21.82    21.46    21.75    397200    19.17999
2007-01-22    22.10    22.11    21.88    22.02    557000    19.41809
2007-01-23    21.70    21.84    21.28    21.78    906000    19.20645
2007-01-24    21.05    21.26    21.00    21.18    882300    18.67735
2007-01-25    21.19    21.49    20.76    20.79    812000    18.33343
2007-01-26    20.95    21.00    20.79    20.85    335900    18.38634
2007-01-29    20.80    20.80    20.37    20.51    676200    18.08652
2007-01-30    20.57    20.67    20.48    20.59    338800    18.15706
2007-01-31    20.35    20.45    19.60    20.30    904700    17.90133
2007-02-01    20.50    20.70    20.46    20.62    346000    18.18352
2007-02-02    20.62    20.85    20.60    20.75    540300    18.29816
2007-02-05    20.67    20.74    20.57    20.69    226500    18.24525
2007-02-06    20.90    20.90    20.65    20.80    399300    18.34224
2007-02-07    20.68    20.69    20.34    20.52    763700    18.09533
2007-02-08    20.36    20.36    20.16    20.27    292000    17.87487
2007-02-09    20.46    20.61    20.21    20.40    480900    17.98952
2007-02-12    20.04    20.05    19.76    19.87    775400    17.52214
2007-02-13    19.78    19.78    19.05    19.45    1842900    17.15177
2007-02-14    19.35    20.08    19.29    19.87    1198400    17.52214
2007-02-15    20.25    20.25    20.01    20.13    419700    17.75142
2007-02-16    20.11    20.20    20.00    20.15    261700    17.76905
2007-02-20    19.60    19.77    19.40    19.70    682100    17.37223
2007-02-21    19.54    19.75    19.51    19.74    441100    17.40750
2007-02-22    19.18    19.45    19.15    19.38    525700    17.09004
2007-02-23    18.65    19.01    18.60    19.00    853600    16.75494
2007-02-26    19.25    19.40    19.06    19.09    1025800    16.83430
```

Environment History Connections Tutorial

Import Dataset 262 MB

R Global Environment

Data

- F An 'xts' object on 2007-01-03/2021-12-28 containing:
- HMC An 'xts' object on 2007-01-03/2021-12-28 containing:
- PG An 'xts' object on 2007-01-03/2021-12-28 containing:
- TC5.N5 An 'xts' object on 2007-01-02/2021-12-28 containing:
- TTM 3773 obs. of 6 variables

Values

- basket_symbols chr [1:3] "PG" "F" "HMC"
- bucket_symbols 'table' int [1:3(id)] 1 1 1

Files Plots Packages Help Viewer

New Folder Delete Rename More

F DATA

Name	Size	Modified
RData	81.3 KB	Dec 28, 2021, 11:58 PM
Rhistory	1.3 KB	Dec 28, 2021, 11:58 PM
R.project.R	331 B	Dec 28, 2021, 11:58 PM
TTM.csv.csv	83.4 KB	Dec 28, 2021, 10:50 PM