Heatmap and Hierarchical Clustering

Code

Yiran Qin

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```
# import libraries for heatmap and correlation
library(plotly)
library(heatmaply)
library(ggcorrplot)
library(quantmod)
library(magrittr)
```

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```
start <- as.Date("2020-02-01")
end <- as.Date("2020-06-01")
getSymbols("FB", src = "yahoo", from = start, to = end)
```

```
[1] "FB"
```

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```
getSymbols(c("BA", "GOOG", "AMZN"), src = "yahoo", from = start, to = end)
```

```
[1] "BA"   "GOOG" "AMZN"
```

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```
stocks <- as.xts(data.frame(FB = FB[, "FB.Close"], BA = BA[, "BA.Close"], GOOG = GOOG[, "GOOG.Cl
ose"], AMZN = AMZN[, "AMZN.Close"]))
```

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```
data3 <- as.matrix(stocks)
```

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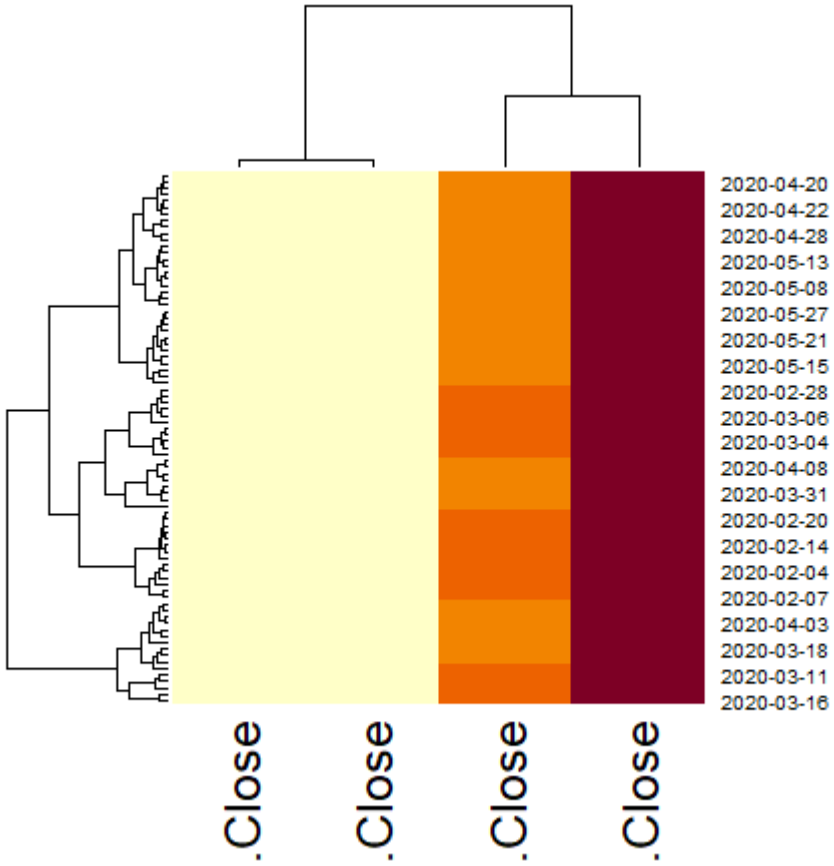
```
heatmap(data3)
```



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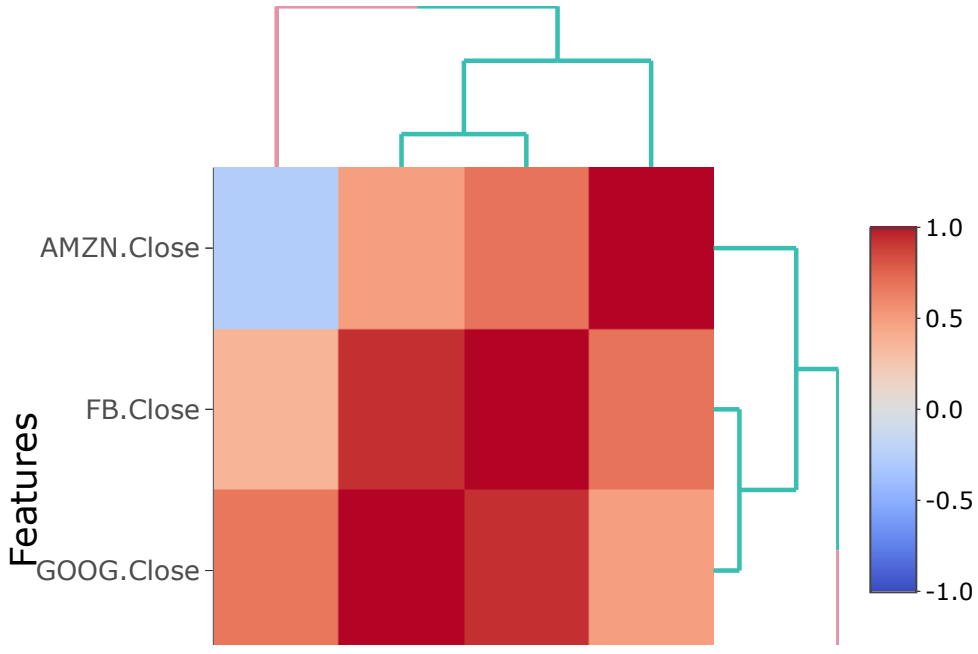
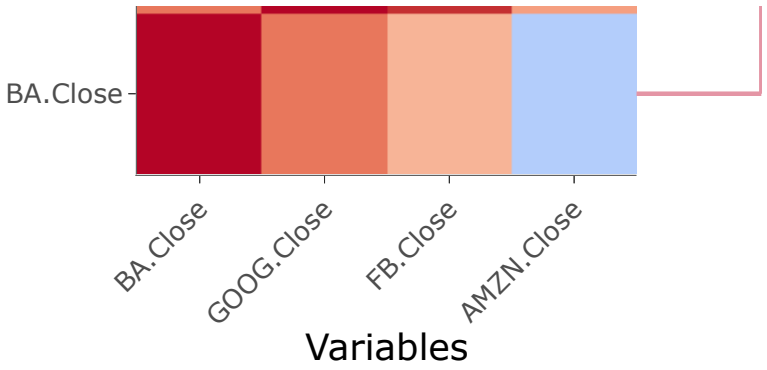
```
heatmaply_cor(
  cor(stocks),
  title = "Heatmap and Hierarchical Clustering",
  xlab = "Variables",
  ylab = "Features",
  k_col = 2,
  k_row = 2
)
```





Example with the simple 'mtcars' dataset.

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```
data2 <- as.matrix(mtcars)
```

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```
heatmap(data2)
```