Heatmap

#Excel file “NSC8.xlsx” format:

	Ctl	Time1	Time2	Time3
O00264	1	0.110701	0.120664	0.013063
O43175	1	0.193093	0.22763	0.01394
O43707-2	1	0.859031	0.404846	0.076652
O43765	1	0.951613	0.26828	0.110753

#save Excel file to text file, “Data_pvalues”, by choosing “Text (Tab delimited) (*.txt)”

#The text file will look like after being opened by WordPad:

```
Ctl     Time1   Time2   Time3
O00264  1       2.658536585     1.918699187     2.105691057
O43175  1       1.2     8.752475248     6.514851485
O43707-2        1       -6.708333333    -2.350364964    -4.110638298
O43765  1       -2.587939698    1.287378641     -1.839285714
```

```
#In R Console, type in following commands marked by blue color;
#At first, open the data file that must be exactly the same format as
shown above. File name and the header in the data file can be
different if you want to change.  However, the text in the commands
must be corresponding to the name and header used in the data file.
```

```
> data<-read.table("D:/NSC8.txt", header=T)

>list(data)

>x<-as.matrix(data)
```

Download all needed packages :

```
utils:::menuInstallPkgs()

--- Please select a CRAN mirror for use in this session ---

> utils:::menuInstallLocal()
```

package ‘gtools’ successfully unpacked and MD5 sums checked, *Download package “gtools” and install.

```
> utils:::menuInstallLocal()
```

package ‘gdata’ successfully unpacked and MD5 sums checked, *Download package “gdata” and install.

> utils:::menuInstallLocal()

package ‘caTools’ successfully unpacked and MD5 sums checked, *Download package “caTools” and install.

> utils:::menuInstallLocal()

local({pkg <- select.list(sort(.packages(all.available = TRUE)),stats=TRUE), *Load package “stats”.

+ if(nchar(pkg)) library(pkg, character.only=TRUE)})

>local({pkg <- select.list(sort(.packages(all.available = TRUE)),MASS=TRUE)

+ if(nchar(pkg)) library(pkg, character.only=TRUE)}), *upload package “MASS”

> utils:::menuInstallLocal()

* installing *source* package 'gplots' ..., * Download “gplots” and install.

>local({pkg <- select.list(sort(.packages(all.available = TRUE)),graphics=TRUE)

+ if(nchar(pkg)) library(pkg, character.only=TRUE)}), *upload local package “graphics”.

>local({pkg <- select.list(sort(.packages(all.available = TRUE)),graphics=TRUE)

+ if(nchar(pkg)) library(pkg, character.only=TRUE)}), *upload local package “cluster”.

>Library (gplots)

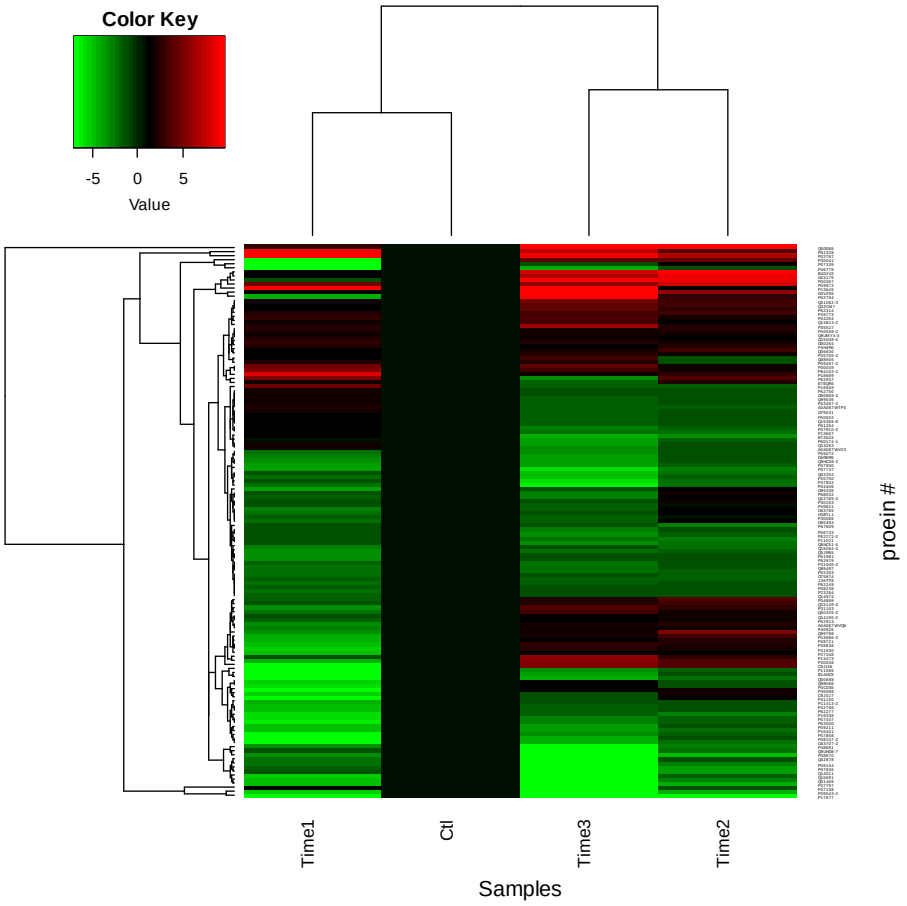
>pairs.breaks<-seq(-10,10,by = 0.5)

> length(pairs.breaks)

[1] 41

>mycol<-colorpanel(n=40,low="green",mid="black",high="red")

heatmap.2(x, dendrogram="both", breaks=pairs.breaks[7:40], col=greenred, key=TRUE, symkey=FALSE, density.info="none",trace="none", cexRow=0.5, cexCol=1, xlab="Samples", ylab="proein #")


Color Key
-5
0
5
Value
proein #
Time1
Ctl
Time3
Time2
Samples