SRT411A0.Rmd

Eric Leung

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ToDo

3.1

```
(2018 - 2014) / (2014-1997) * 100
```

```
## [1] 23.52941
```

3.2

```
a=4
b=(2014-1997)
a/b*100
```

```
## [1] 23.52941
```

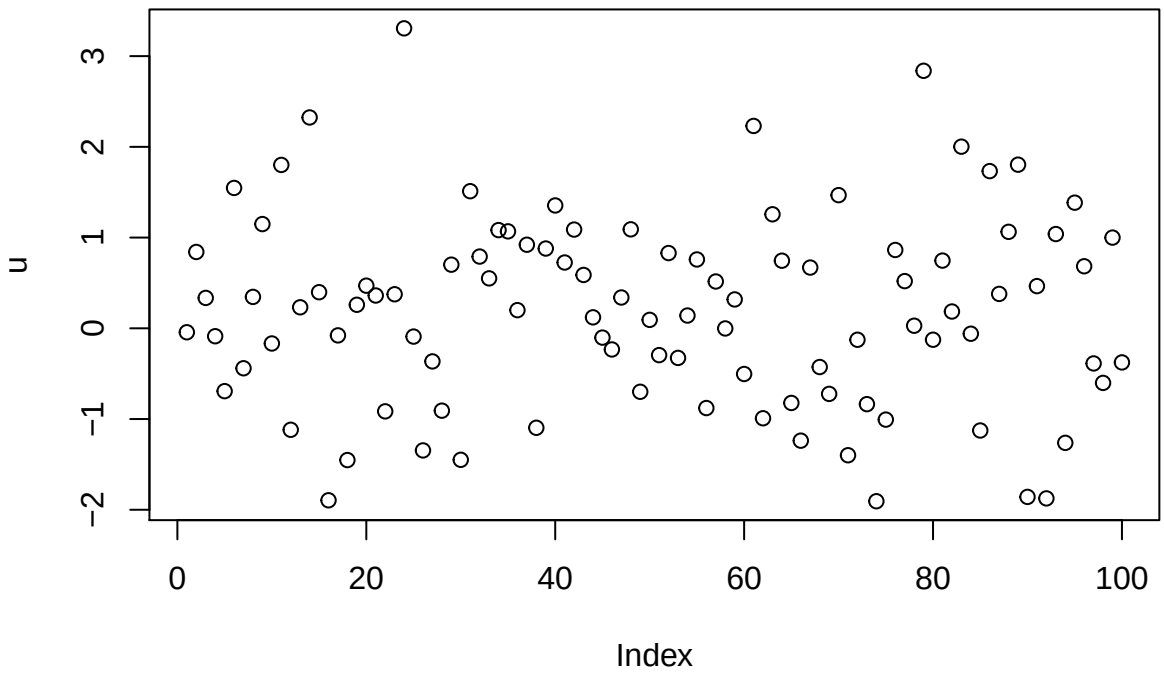
3.4

```
sum(4,5,8,11)
```

```
## [1] 28
```

3.5

```
u=rnorm(100)
plot(u)
```

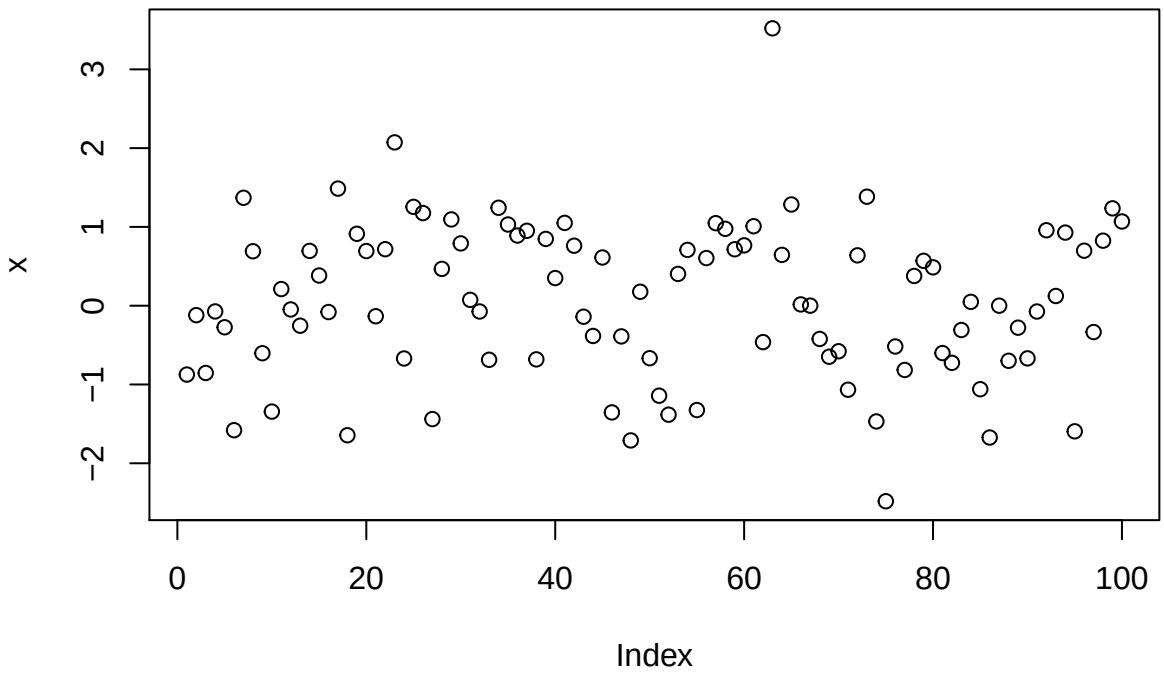


4

```
help(sqrt)
```

5

```
source("firstscript.R")
```



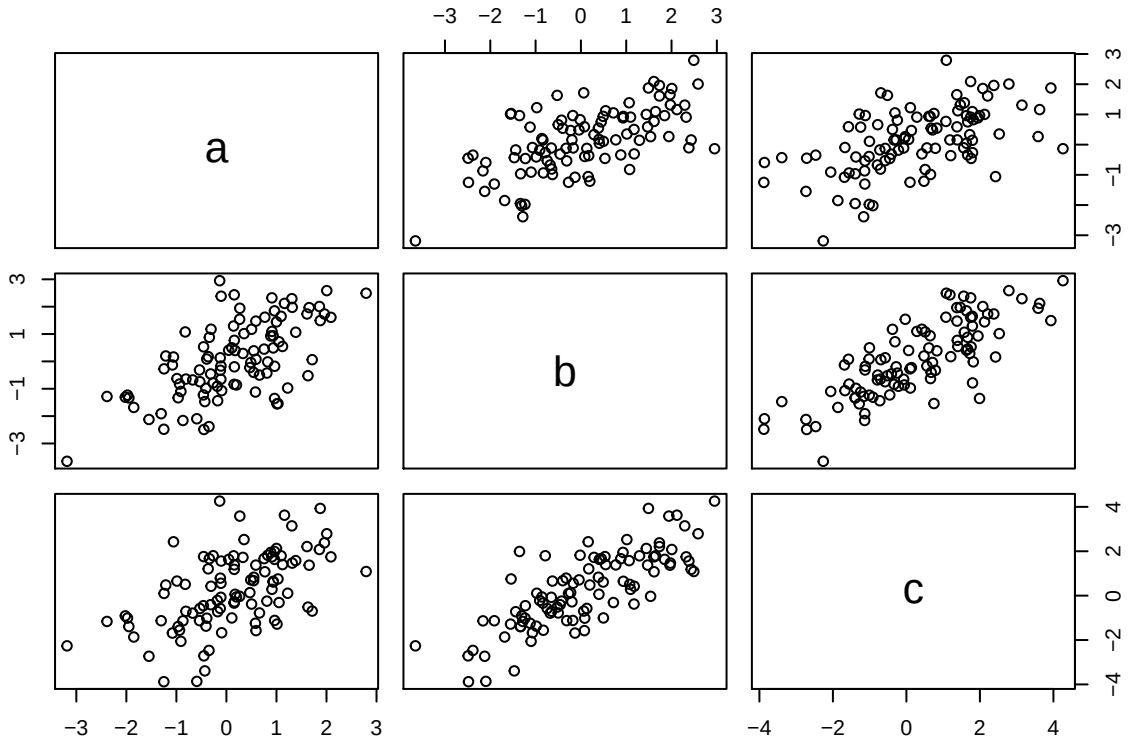
6.2

```
p=seq(from=31, to=60, by=1)
q=matrix(data=p,ncol=5,nrow=6)
q
```

```
##      [,1] [,2] [,3] [,4] [,5]
## [1,]   31   37   43   49   55
## [2,]   32   38   44   50   56
## [3,]   33   39   45   51   57
## [4,]   34   40   46   52   58
## [5,]   35   41   47   53   59
## [6,]   36   42   48   54   60
```

6.3 this just plots a bunch of random number between -3 and +5

```
x1=c(rnorm(100))
x2=c(rnorm(100))
x3=c(rnorm(100))
t=data.frame(a=x1,b=x1+x2,c=x1+x2+x3)
plot(t)
```

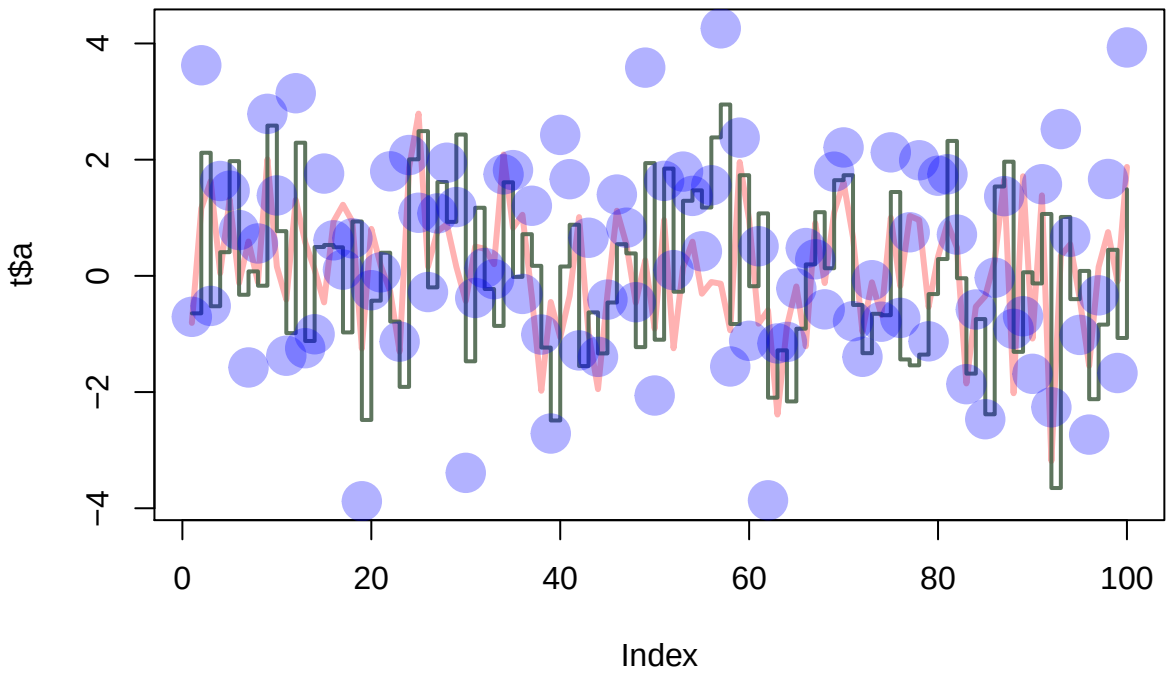


7 the rgb represents the color of whatever the arguemnt is plotting, in this case it could be the plot, the lines, and the points that have a specific colour

lwd seems like it controls the width/thickness of whatever the argument it is describing, if you increase the lwd, the width/size of the line increases

pch seems to change the shape of the points depending on the value and cex changes the overall size of the points depending on the value, the higher the bigger.

```
plot(t$a, type="l", ylim=range(t),
     lwd=3, col=rgb(1,0,0,0.3))
lines(t$b, type="s", lwd=2,
      col=rgb(0.3,0.4,0.3,0.9))
points(t$c, pch=20, cex=4,
       col=rgb(0,0,1,0.3))
```



8

```
d1=read.table(file="tst1.txt",header=TRUE)
d2=d1$g*5
write.table(d2,file="tst2.txt",row.names=FALSE,col.names="g")
```

9

```
d3=data.frame=c(1:100,1)
d3^2
```

```
##   [1]     1     4     9    16    25    36    49    64    81   100   121
##  [12]   144   169   196   225   256   289   324   361   400   441   484
##  [23]   529   576   625   676   729   784   841   900   961  1024  1089
##  [34]  1156  1225  1296  1369  1444  1521  1600  1681  1764  1849  1936
##  [45]  2025  2116  2209  2304  2401  2500  2601  2704  2809  2916  3025
##  [56]  3136  3249  3364  3481  3600  3721  3844  3969  4096  4225  4356
##  [67]  4489  4624  4761  4900  5041  5184  5329  5476  5625  5776  5929
##  [78]  6084  6241  6400  6561  6724  6889  7056  7225  7396  7569  7744
##  [89]  7921  8100  8281  8464  8649  8836  9025  9216  9409  9604  9801
## [100] 10000     1
```

10.2

```
date1=strptime(c("20140706080000","20150706000000"),format="%Y%m%d%H%M%S")
present=c(10,6)
date1
```

```
## [1] "2014-07-06 08:00:00 PDT" "2015-07-06 00:00:00 PDT"
```

```
present
```

```
## [1] 10  6
```

11.2

```
v=seq(from=1, to=100, by=1)
s=c()
for(i in 1:100)
{
  if(v[i]<5)
  {
    s[i]=v[i]*5;
  }
  else if(v[i]>90)
  {
    s[i]=v[i]*10;
  }
  else
  {
    s[i]=v[i]*0.1;
  }
}
s
```

```
##   [1]    5.0   10.0   15.0   20.0    0.5    0.6    0.7    0.8    0.9    1.0
##  [11]    1.1    1.2    1.3    1.4    1.5    1.6    1.7    1.8    1.9    2.0
##  [21]    2.1    2.2    2.3    2.4    2.5    2.6    2.7    2.8    2.9    3.0
##  [31]    3.1    3.2    3.3    3.4    3.5    3.6    3.7    3.8    3.9    4.0
##  [41]    4.1    4.2    4.3    4.4    4.5    4.6    4.7    4.8    4.9    5.0
##  [51]    5.1    5.2    5.3    5.4    5.5    5.6    5.7    5.8    5.9    6.0
##  [61]    6.1    6.2    6.3    6.4    6.5    6.6    6.7    6.8    6.9    7.0
##  [71]    7.1    7.2    7.3    7.4    7.5    7.6    7.7    7.8    7.9    8.0
##  [81]    8.1    8.2    8.3    8.4    8.5    8.6    8.7    8.8    8.9    9.0
##  [91]  910.0  920.0  930.0  940.0  950.0  960.0  970.0  980.0  990.0 1000.0
```

11.3

```
f=function(arg1,arg2)
{
  v[i]=arg1[i];
  for(i in length(v))
  {

  }
}
f
```

```
## function(arg1,arg2)
## {
##   v[i]=arg1[i];
##   for(i in length(v))
##   {
##
##   }
## }
```