SRT411A0

Introduction

In this assignment, you were to read the document "A (very) Short Introduction to R" and complete all 14 of the "To-Do" Tasks that were at the end of each section. Then make a report using RMarkdown and publish it on GitHub.

Task 1

```
((2015-2014)/(2014-1997))*100
```

```
## [1] 5.882353
```

Task 2

```
a <- 2015-2014
b <- 2014-1997
c <- 100
a/b *c
```

```
## [1] 5.882353
```

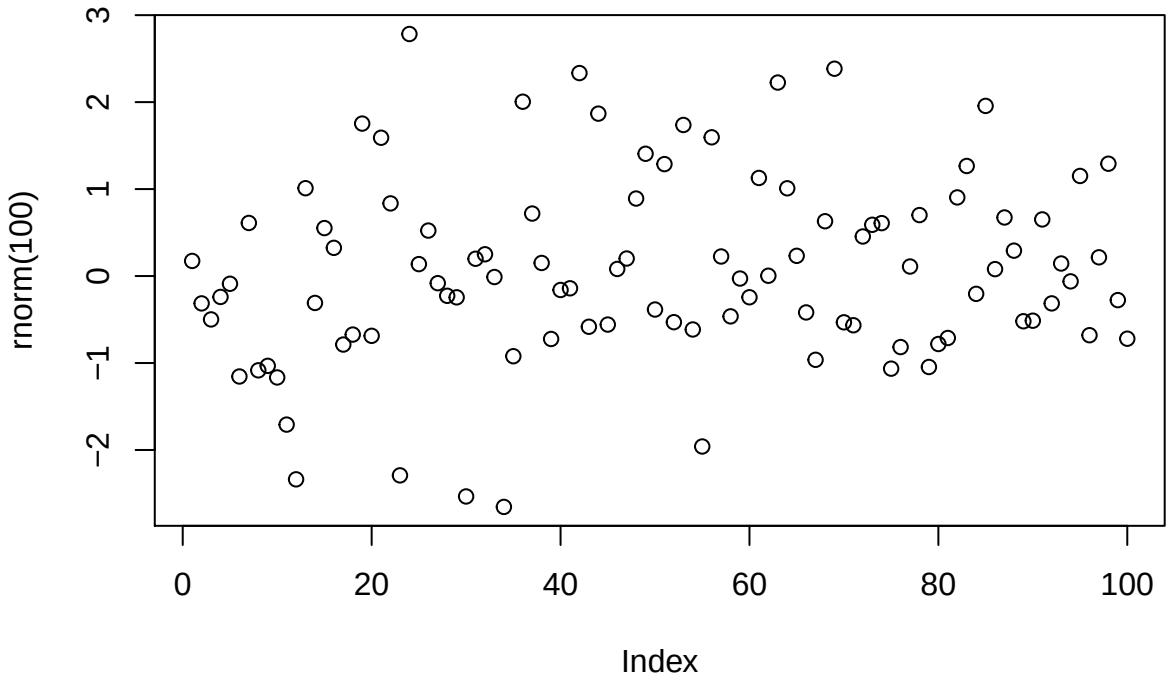
Task 3

```
vector <- c(4, 5, 8, 11)
sum(vector)
```

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

Task 4

```
plot(rnorm(100))
```

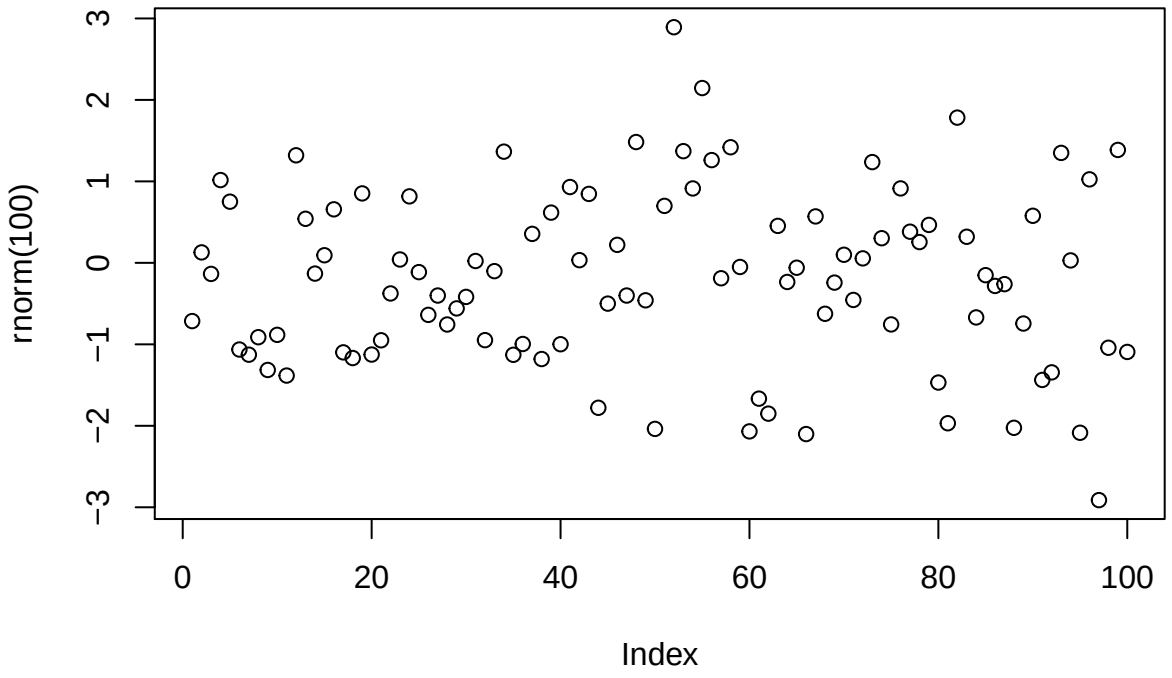


Task 5

```
help(sqrt)
```

Task 6

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



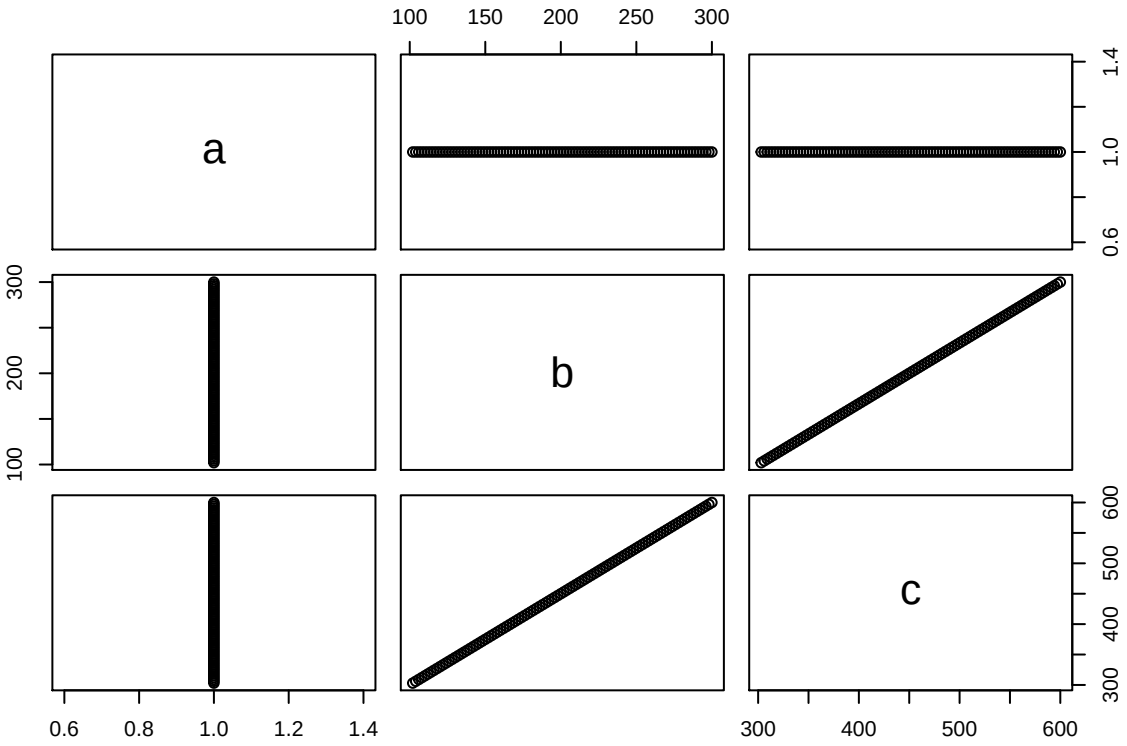
Task 7

```
P = seq(from = 31, to = 60, by = 1)
Q = matrix(P, ncol = 5, nrow = 6)
P
```

```
##  [1] 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53
## [24] 54 55 56 57 58 59 60
```

Task 8

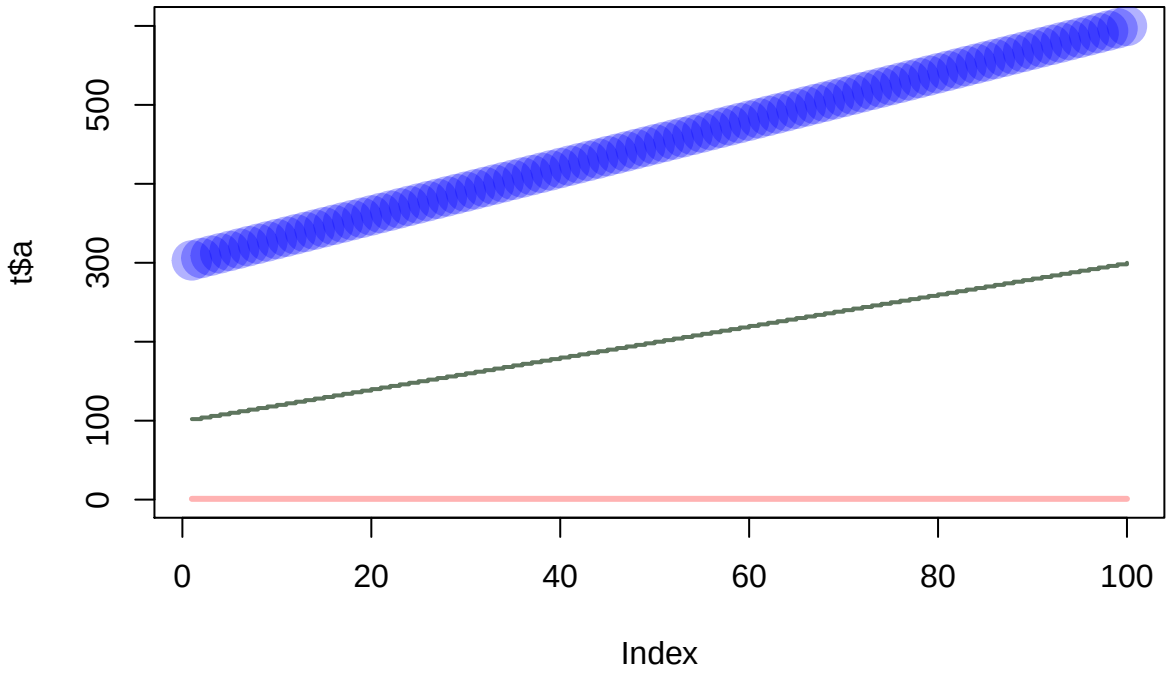
```
x1 = seq(from = 1, to = 100, by = 1)
x2 = seq(from = 101, to = 200, by = 1)
x3 = seq(from = 201, to = 300, by = 1)
 t = data.frame(a = 1, b = x1 + x2, c = x1 + x2 + x3)
plot(t)
```



Task 9

```
x1 = seq(from = 1, to = 100, by = 1)
x2 = seq(from = 101, to = 200, by = 1)
x3 = seq(from = 201, to = 300, by = 1)
t = data.frame(a = 1, b = x1 + x2, c = x1 + x2 + x3)
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))
```



Task 10

```
read <- read.table(file = "tst1.txt", header = TRUE)
d <- read$g*5
write.table(d, file = "tst2.txt", row.names = FALSE)
```

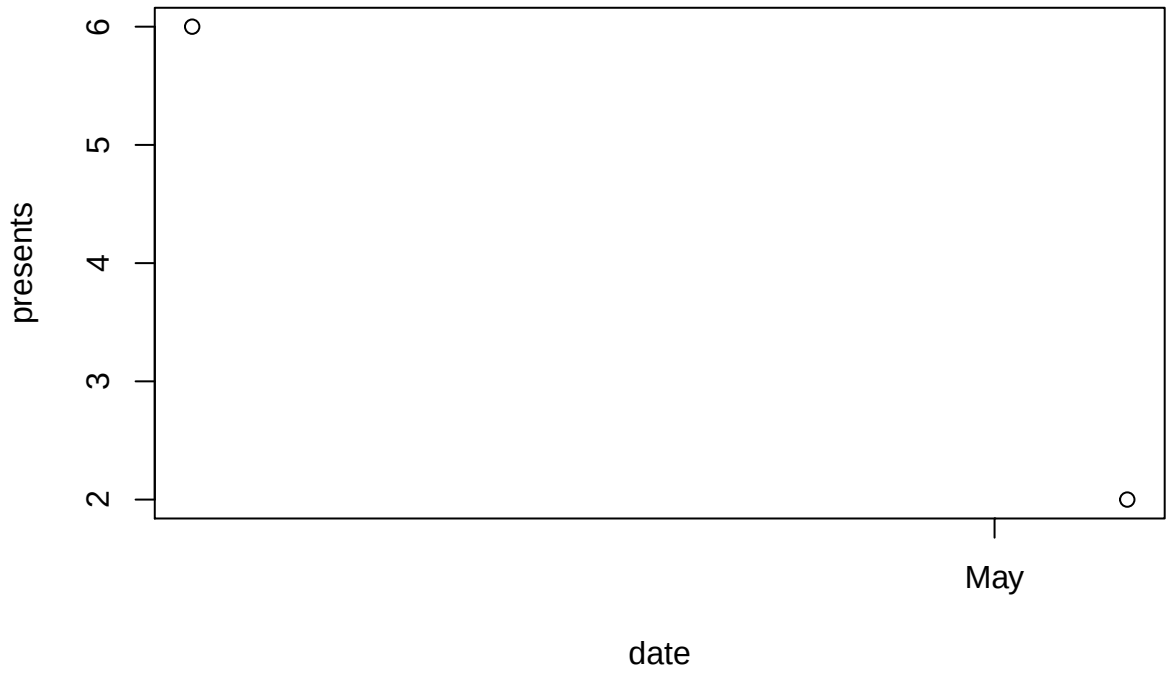
Task 11

```
sqrt(mean(rnorm(100)))
```

```
## [1] 0.3208569
```

Task 12

```
date <- strptime( c("22052017", "25122016"), format = "%d%m%Y")
presents <- c(2, 6)
plot(date, presents)
```



Task 13

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

Task 14

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

  }
}
```

Task 15

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

  }
}
```

Resources

https://www.dataquest.io/blog/how-to-share-data-science-portfolio/