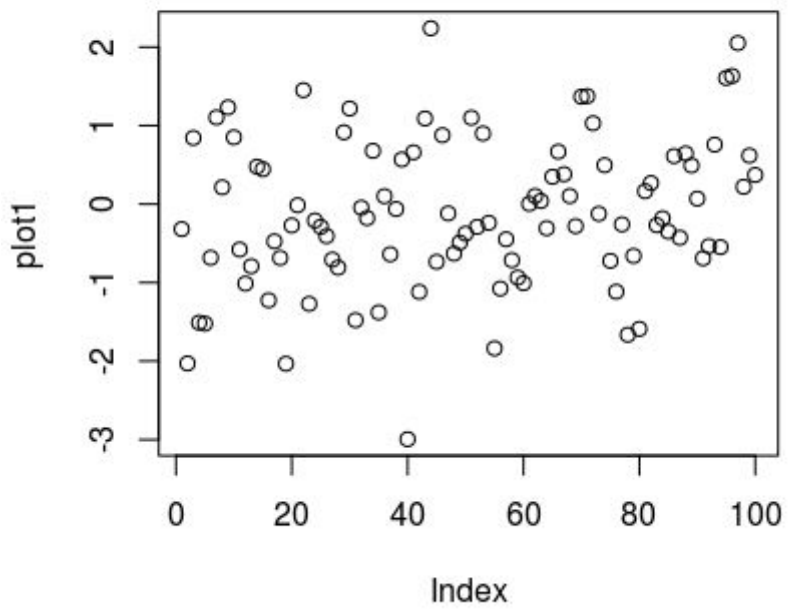
Assignment 0 - Adam Cook

1
```
> ((2018 - 2016) / (2018 - 1997)) * 100
[1] 9.52381
```

2
```
> school <- 2018 - 2016
> born <- 2018 - 1997
> (school / born) * 100
[1] 9.52381
```

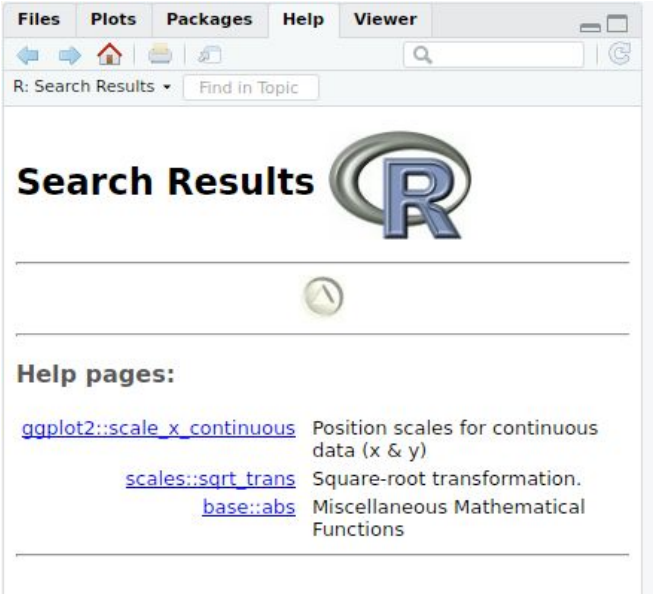
3
```
> func1 <- c(4,5,8,11)
> sum(func1)
[1] 28
```

4
```
> plot1 <- rnorm(100)
> plot(plot1)
```

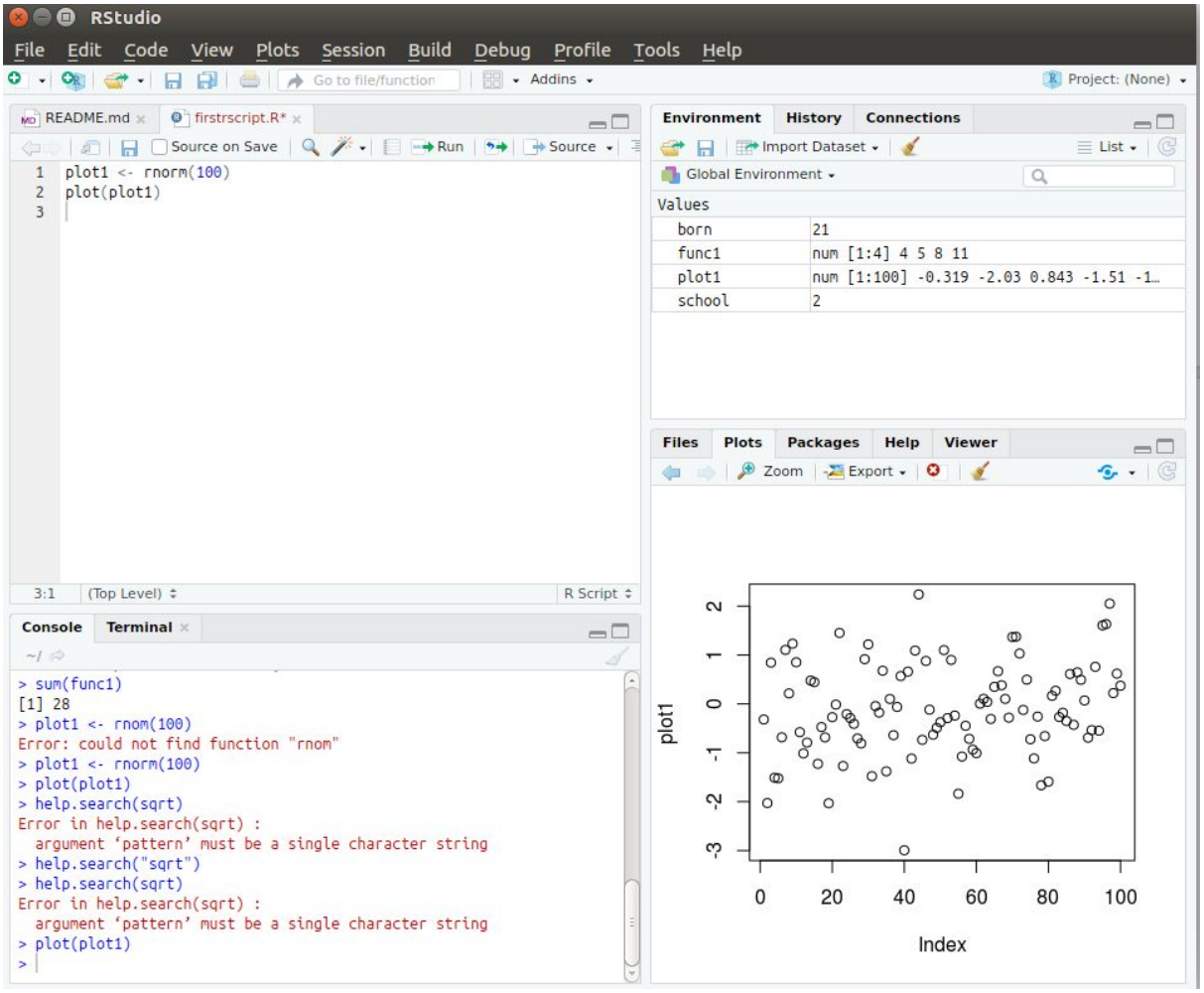


5

> help.search("sqrt")



6



7

```
> P <- seq(from=31,to=60, by=1)
> Q <- matrix(data=seq(from=31, to=60, by=1), ncol=5)
```

8

```
x1 <- runif(100, min=0, max=100)
x2 <- runif(100, min=0, max=100)
x3 <- runif(100, min=0, max=100)
t <- data.frame(x = c(x1), y = c(x1 + x2), z = c(x1 + x2 + x3))
plot(t)
sd(t)
```

9

#1 plots the first column in a coloured plot, #2 plots column 2 in a similar way with different colours, and #3 plots column 3 with

10

```
> d1 = read.table(file="tst1.txt", header=TRUE)
> g <- (d1[g * 5)
> write.table(g, file="tst2.txt", row.names=FALSE)
```

11

```
> x1 <- runif(100, min=0, max=100)
> value <- (sqrt(x1).mean)
> value <- c(sqrt(x1))
> mean(value)
[1] 7.063058
```

12

```
> dates <- strptime(c("20180202", "20171225", "20180922"), format="%Y%m%d")
> pres <- c(0, 4, 4)
> m <- list(c(dates), c(pres))
> mat <- matrix( unlist(m), nrow=length(m))
> plot(mat)
```

13

```
vect <- seq(from=1, to=100, by=1)

for(i in vect) {
  if((i < 5) && (i > 90)){
          print(i * 5)
  } else {
          print(i * 0.1)
  }
```

```
}
```

14

```
fun1 = function(arg1) {
  vect <- arg1
  for(i in vect) {
          if((i < 5) && (i > 90)){
          print(i * 5)
          } else {
          print(i * 0.1)
          }
  }
}
```