Lecture_Jan27

January 27, 2021

[ ]:

```
# this is a cell of code
# Anything after # is "commented out," meaning it displays as text and is not␣
 ↪run as code
# you can also hit SHIFT+ENTER

2 * 3    # I can also comment here!
```

[ ]:

```
# loop over a billion numbers
for (i in seq(1, 1000000000)){
    i
}
```

1 This

1.1 Is A

1.1.1 Markdown

Cell **bold**

italics

Some common Markdown commands

[1]:

```
# assign the variable x a value
x <- 3
```

[2]:

```
# what is x?
x
```

3

[5]:

```
# objects in working memory
ls()
```

[4]:

```
# remove x from working memory
rm(x)
```

[6]:

```
# run many lines at the same time
x <- 6
```

```
y <- 7
x * y
```

42

[7]:

```
# semi-colon
x <- 10; y <- 20
x * y
```

200

[14]:

```
# naming objects
myVariable <- 10
my_object <- 20
My_object <- 30
myvariable <- 40
```

[15]:

```
my_object; My_object
```

20

30

[16]:

```
myVariable; myvariable
```

10

40

[17]:

```
# strings are space sensitive
x <- "hello world"
y <- "helloworld"
x; y
```

'hello world'

'helloworld'

[18]:

```
# use parentheses to display assignments
(x <- "hello world") # equivalent to ```x <- "hello world"; x```
(y <- "helloworld")
```

'hello world'

'helloworld'

[20]:

```
# R will do its best to be helpful with errors
x <- "hello'
```

```
Error in parse(text = x, srcfile = src): <text>:2:6: unexpected INCOMPLETE_STRING
1: # R will do its best to be helpful with errors
2: x <- "hello'
```

```
      ^
Traceback:
```

[21]:

```
# the command seq is a function
seq(1, 10)
seq(10)
seq(1, 10, 2)
seq(1, 10, 2, 10)
```

1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. 8 9. 9 10. 10

1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. 8 9. 9 10. 10

1. 1 2. 3 3. 5 4. 7 5. 9

```
Error in seq.default(1, 10, 2, 10): too many arguments
Traceback:

1. seq(1, 10, 2, 10)
2. seq.default(1, 10, 2, 10)
3. stop("too many arguments")
```

[22]:

```
# get help for using seq
?seq
```

[24]:

```
# note the spacing style
seq(1, 2, length.out=3)
```

1. 1 2. 1.5 3. 2

Style Guide

Other useful commands, try them!

[25]:

```
# get working directory
getwd()

# See all example datasets in available packages
data()
```

'/Users/mruddy/Documents/BSDS100'

[ ]:

```

```