Reordering Data

Getting and Cleaning Data

```
> msleep %>%
   filter(order == "Primates", sleep_total > 10) %>%
   select(name, sleep_rem, sleep_cycle, sleep_total)
# A tibble: 5 x 4
              sleep_rem sleep_cycle sleep_total
 name
 <chr>
                 <dbl>
                            <dbl>
                                        <dbl>
1 Owl monkey
                  1.80
                           NA
                                         17.0
2 Patas monkey
              1.10
                           NA
                                         10.9
3 Macaque
             1.20
                           0.750
                                        10.1
4 Slow loris
                 NA
                                         11.0
                           NA
                                         11.0
5 Potto
                 NA
                           NA
```

```
msleep %>%
  filter(order == "Primates", sleep_total > 10) %>%
  select(name, sleep_rem, sleep_cycle, sleep_total, everything())
```

```
# A tibble: 5 x 11
```

	name	sleep_rem	sleep_cycle	sleep_total	genus	vore	order	conservation	awake	brainwt	bodywt
	<chr></chr>	<db1></db1>	<db1></db1>	<db1></db1>	<chr></chr>	<chr></chr>	<chr></chr>	<chr></chr>	<db1></db1>	<dbl></dbl>	<db1></db1>
1	Owl monkey	1.8	NA	17	Aotus	omni	Primat	NA	7	0.0155	0.48
2	Patas monk	1.1	NA	10.9	Erythroce	omni	Primat	lc	13.1	0.115	10
3	Macaque	1.2	0.75	10.1	Macaca	omni	Primat	NA	13.9	0.179	6.8
4	Slow loris	NA	NA	11	Nyctibeus	carni	Primat	NA	13	0.0125	1.4
5	Potto	NA	NA	11	Perodicti…	omni	Primat	lc	13	NA	1.1

Reordered columns

Everything else!

```
msleep %>%
  filter(order == "Primates") %>%
  select(name, sleep_rem, sleep_cycle, sleep_total) %>%
  arrange(sleep_total)
 # A tibble: 12 x 4
                    sleep_rem sleep_cycle sleep_total
    name
    <chr>
                        \langle dbl \rangle
                                    <db1>
                                                <db1>
                                                        smallest
                                                 8
  1 Human
                          1.9
                                    1.5
                                    0.667
  2 Baboon
                                                 9.4
  3 Mongoose lemur
                          0.9
                                   NA
                                                 9.5
                                                 9.6
  4 Squirrel monkey
                          1.4
                                   NA
                          1.4
  5 Chimpanzee
                                    1.42
                                                 9.7
                                    0.55
                                                 9.8
  6 Galago
                          1.1
  7 Grivet
                                                 10
                          0.7
                                   NA
  8 Macaque
                          1.2
                                    0.75
                                                 10.1
  9 Patas monkey
                          1.1
                                   NA
                                                 10.9
 10 Slow loris
                         NA
                                   NA
                                                 11
                                                 11
 11 Potto
                         NA
                                   NA
                                                         largest
 12 Owl monkey
                                   NA
                                                 17
                          1.8
```

```
msleep %>%
  filter(order == "Primates") %>%
  select(name, sleep_rem, sleep_cycle, sleep_total) %>%
  arrange(desc(sleep_total))
# A tibble: 12 x 4
   name
                   sleep_rem sleep_cycle sleep_total
   <chr>>
                       <db1>
                                   <db1>
                                              <db1>
                                               17
                                                        largest
 1 Owl monkey
                        1.8
                                 NA
 2 Slow loris
                       NA
                                               11
                                 NA
 3 Potto
                       NA
                                 NA
                                               11
                                               10.9
 4 Patas monkey
                        1.1
                                 NA
                        1.2
 5 Macaque
                                  0.75
                                               10.1
 6 Grivet
                        0.7
                                               10
                                 NA
                         1.1
                                  0.55
                                                9.8
 7 Galago
 8 Chimpanzee
                        1.4
                                  1.42
                                                9.7
 9 Squirrel monkey
                        1.4
                                 NA
                                                9.6
10 Mongoose lemur
                        0.9
                                 NA
                                                9.5
                                  0.667
                                                9.4
11 Baboon
                         1.9
                                  1.5
                                                8
12 Human
                                                       smallest
```

```
msleep %>%
  filter(order == "Primates") %>%
  select(name, sleep_rem, sleep_cycle, sleep_total) %>%
  arrange(name)
```

A tibble: 12 x 4

	name	leep_rem	sleep_cycle	sleep_total
	<chr></chr>	<dbl></dbl>	<db1></db1>	<db1></db1>
	1 Baboon	1	0.667	9.4
	2 Chimpanzee	1.4	1.42	9.7
Sorted	3 Galago	1.1	0.55	9.8
alphabetically by	4 Grivet	0.7	NA	10
	5 Human	1.9	1.5	8
name	6 Macaque	1.2	0.75	10.1
	7 Mongoose lemur	0.9	NA	9.5
	8 Owl monkey	1.8	NA	17
	9 Patas monkey	1.1	NA	10.9
	10 Potto	NA	NA	11
	11 Slow loris	NA	NA	11
	<pre>Squirrel monkey</pre>	1.4	NA	9.6

```
msleep %>%
  filter(order == "Primates") %>%
  select(name, sleep_rem, sleep_cycle, sleep_total) %>%
  arrange(sleep_cycle, sleep_total)
# A tibble: 12 x 4
                   sleep_rem sleep_cycle sleep_total
   name
                       <db1>
                                   <db1>
                                               < dh1 >
   <chr>
                         1.1
                                   0.55
                                                9.8
 1 Galago
                                                          Sorted first by
                                   0.667
                                                9.4
 2 Baboon
                                                          sleep_cycle ...
                         1.2
                                   0.75
                                                10.1
 3 Macaque
 4 Chimpanzee
                         1.4
                                   1.42
                                                9.7
 5 Human
                         1.9
                                   1.5
                                                 8
                                                 9.5
 6 Mongoose lemur
                        0.9
                                  NA
                                                 9.6
 7 Squirrel monkey
                         1.4
                                  NA
                                                           ... and then sorted
                                                10
 8 Grivet
                        0.7
                                  NA
                                                          by sleep_total
 9 Patas monkey
                         1.1
                                  NA
                                                10.9
10 Slow loris
                                  NA
                                                11
                        NA
                        NA
                                                11
11 Potto
                                  NA
```

1.8

NA

12 Owl monkey

17

Summarizing: Reordering Data

Getting and Cleaning Data