Assignment 12: Conditionals

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Assignment

1. Choice Operators (20 pts)

1a

```
## [1] TRUE
```

1b

```
## [1] FALSE FALSE  TRUE
```

1c

```
## [1] FALSE
```

1d

```
## [1]  TRUE FALSE FALSE  TRUE  TRUE
```

1e

```
## [1] FALSE
```

1f

```
## [1] TRUE
```

1g

```
## [1] TRUE
```

1h

```
## [1] TRUE
```

1i

```
## [1]  TRUE  TRUE FALSE FALSE  TRUE
```

2. If Statements (20 points)

2a

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

2b

```
## [1] 5
```

2c

```
## [1] 0
```

2d

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

```
## [1] 5
```

```
## [1] 0
```

```
## [1] 0
```

```
## [1] 0
```

3. If Statements in Functions (20 points)

3a

3b

```
## [1] 20
```

3c

```
## [1] 30
```

3d

3e

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

3f

```
## [1] 24.5
```

3g

```
## [1] NA
```

4. Size Estimates by Name (20 points)

4a

```
## [1] 4779.848
```

4b

```
## [1] 1385.286
```

4c

```
## [1] 8070.685
```

4d

```
## [1] NA
```

Challenge 1 (optional)

```
## Warning in get_mass_from_length_by_name(13, "Ankylosauria"): No known
## estimation for Ankylosauria
```

Challenge 2 (optional)

```
## [1] 1283.047
```

5. Using dplyr Choice Functions (20 points)

```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

5a

```
## [1] "small"
```

5b

```
## [1] "medium"
```

5c

```
## [1] "medium"
```

5d *Note: I used the* `.after` *argument in the* `mutate()` *function to control where the new column shows up so it can be seen in the answer key.*

```
## # A tibble: 392 x 10
##    date       latitude site   size size_category air_temp air_temp_sd water_temp
##    <date>        <dbl> <chr> <dbl> <chr>             <dbl>       <dbl>      <dbl>
##  1 2016-07-24       30 GTM    12.4 small              21.8        6.39       24.5
##  2 2016-07-24       30 GTM    14.2 small              21.8        6.39       24.5
##  3 2016-07-24       30 GTM    14.5 small              21.8        6.39       24.5
##  4 2016-07-24       30 GTM    12.9 small              21.8        6.39       24.5
##  5 2016-07-24       30 GTM    12.4 small              21.8        6.39       24.5
##  6 2016-07-24       30 GTM    13.0 small              21.8        6.39       24.5
##  7 2016-07-24       30 GTM    10.3 small              21.8        6.39       24.5
##  8 2016-07-24       30 GTM    11.2 small              21.8        6.39       24.5
##  9 2016-07-24       30 GTM    12.7 small              21.8        6.39       24.5
## 10 2016-07-24       30 GTM    14.6 small              21.8        6.39       24.5
## # i 382 more rows
## # i 2 more variables: water_temp_sd <dbl>, name <chr>
```

5e *Note: I used the* `.after` *argument in the* `mutate()` *function to control where the new column shows up so it can be seen in the answer key.*

```
## # A tibble: 392 x 10
##    date       latitude site   size size_category3 air_temp air_temp_sd
##    <date>        <dbl> <chr> <dbl> <chr>              <dbl>       <dbl>
##  1 2016-07-24       30 GTM    12.4 medium              21.8        6.39
##  2 2016-07-24       30 GTM    14.2 medium              21.8        6.39
##  3 2016-07-24       30 GTM    14.5 medium              21.8        6.39
##  4 2016-07-24       30 GTM    12.9 medium              21.8        6.39
##  5 2016-07-24       30 GTM    12.4 medium              21.8        6.39
##  6 2016-07-24       30 GTM    13.0 medium              21.8        6.39
##  7 2016-07-24       30 GTM    10.3 medium              21.8        6.39
##  8 2016-07-24       30 GTM    11.2 medium              21.8        6.39
##  9 2016-07-24       30 GTM    12.7 medium              21.8        6.39
## 10 2016-07-24       30 GTM    14.6 medium              21.8        6.39
```

```
## # i 382 more rows
## # i 3 more variables: water_temp <dbl>, water_temp_sd <dbl>, name <chr>
```