

# Assignment 12: Conditionals

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## Assignment

### 1. Choice Operators (20 pts)

```
## [1] "1a"
```

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

```
## [1] "1b"
```

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

```
## [1] "1c"
```

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

```
## [1] "1d"
```

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

```
## [1] "1e"
```

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

```
## [1] "1f"
```

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

```
## [1] "1g"
```

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

```
## [1] "1h"
```

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

```
## [1] "1i"
```

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

## 2. If Statements (20 points)

```
## [1] "2a"
```

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

```
## [1] "2b"
```

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

```
## [1] "2c"
```

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

```
## [1] "2d"
```

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

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

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

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

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

## 3. If Statements in Functions (20 points)

```
## [1] "3a"
```

```
## [1] "3b"
```

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

```
## [1] "3c"
```

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

```
## [1] "3d"
```

```
## [1] "3e"
```

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

```
## [1] "3f"
```

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

```
## [1] "3g"
```

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

#### 4. Size Estimates by Name (20 points)

```
## [1] 4779.848
## [1] 1385.286
## [1] 8070.685
## [1] NA
```

#### 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

## [1] "5a"

## [1] "small"

## [1] "5b"

## [1] "medium"

## [1] "5c"

## [1] "medium"

## [1] "5d"

## # 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>
```

```
## [1] "5e"
```

```
## # 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>
```