

Module 2, Assignment 2

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1.

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.2      v readr      2.1.4
## v forcats    1.0.0      v stringr   1.5.0
## v ggplot2    3.4.2      v tibble    3.2.1
## v lubridate  1.9.2      v tidyr     1.3.0
## v purrr      1.0.1
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

2.

```
## Rows: 320 Columns: 6
## -- Column specification -----
## Delimiter: ","
## chr (1): tank_category
## dbl (5): tank_id, fish_id, perc_soy_protein, day_30_weight, avg_tank_temp
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
## # A tibble: 6 x 6
##   tank_id fish_id perc_soy_protein day_30_weight avg_tank_temp tank_category
##   <dbl>   <dbl>         <dbl>         <dbl>         <dbl> <chr>
## 1      1      1           0.2           334.          77.2 warm
## 2      1      2           0.2           198.          77.2 warm
## 3      1      3           0.2           315.          77.2 warm
## 4      1      4           0.2           316.          77.2 warm
## 5      1      5           0.2            89.4          77.2 warm
## 6      1      6           0.2            74.7          77.2 warm
```

```
## # A tibble: 6 x 6
##   tank_id fish_id perc_soy_protein day_30_weight avg_tank_temp tank_category
##   <dbl>   <dbl>         <dbl>         <dbl>         <dbl> <chr>
## 1     16     315           0.8          1228.          76.1 warm
## 2     16     316           0.8           630.          76.1 warm
## 3     16     317           0.8           508.          76.1 warm
## 4     16     318           0.8           443.          76.1 warm
## 5     16     319           0.8           495.          76.1 warm
## 6     16     320           0.8          1078.          76.1 warm
```

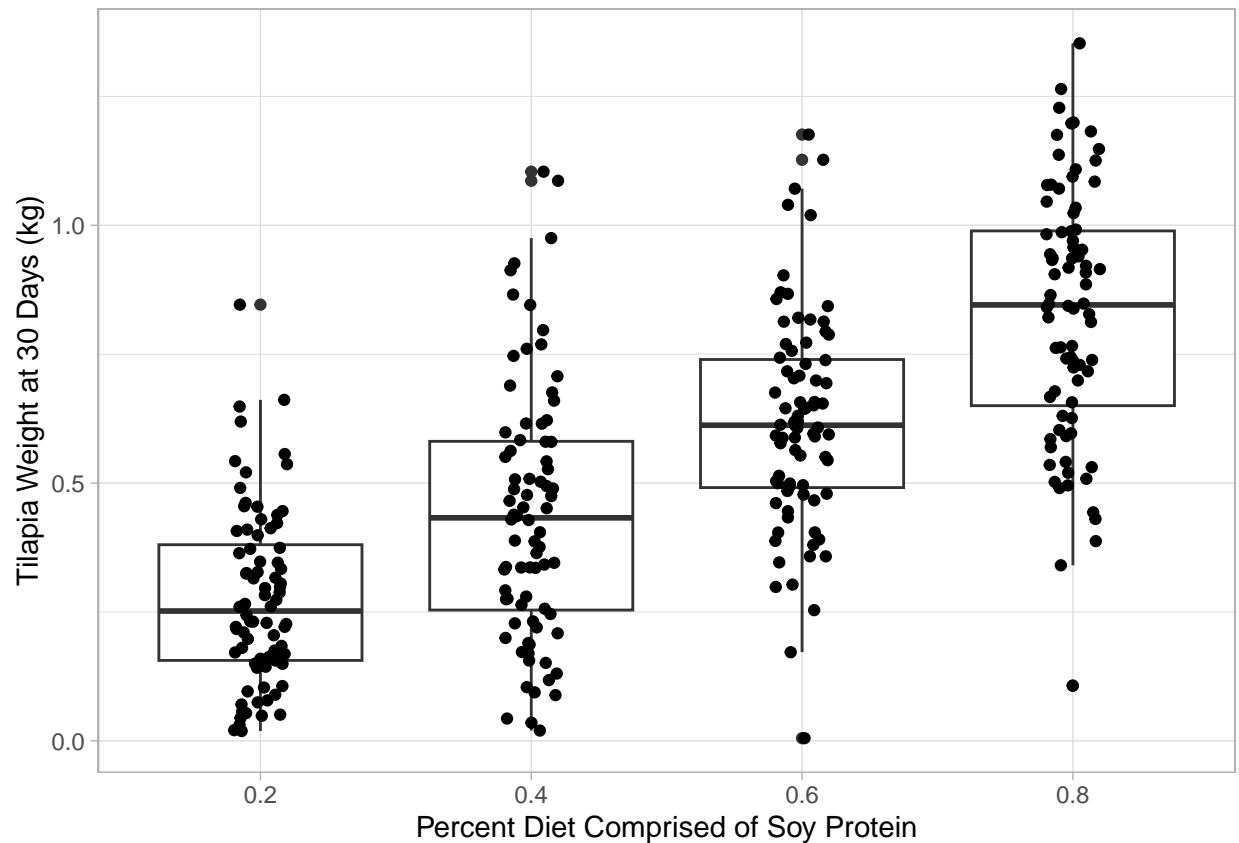
5.

```
##   tank_id fish_id perc_soy_protein day_30_weight avg_tank_temp tank_category
## 1      1      1          0.2      333.61062      77.2          warm
## 2      1      2          0.2      197.65859      77.2          warm
## 3      1      3          0.2      315.16449      77.2          warm
## 4      1      4          0.2      316.45632      77.2          warm
## 5      1      5          0.2      89.43901       77.2          warm
## 6      1      6          0.2      74.74951       77.2          warm
##   day_30_weight_kg
## 1      0.33361062
## 2      0.19765859
## 3      0.31516449
## 4      0.31645632
## 5      0.08943901
## 6      0.07474951
```

6.

```
## # A tibble: 4 x 2
##   perc_soy_protein mean_weight_kg
##   <fct>             <dbl>
## 1 0.2              0.276
## 2 0.4              0.441
## 3 0.6              0.618
## 4 0.8              0.829
```

7.



8.

```
## 'summarise()' has grouped output by 'perc_soy_protein'. You can override using
## the '.groups' argument.
```

```
## # A tibble: 8 x 3
## # Groups:   perc_soy_protein [4]
##   perc_soy_protein tank_category mean_weight_kg
##   <fct>           <chr>           <dbl>
## 1 0.2             cold             0.279
## 2 0.2             warm             0.272
## 3 0.4             cold             0.420
## 4 0.4             warm             0.448
## 5 0.6             cold             0.617
## 6 0.6             warm             0.620
## 7 0.8             cold             0.824
## 8 0.8             warm             0.833
```

9.

