Table Demo

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Contents

- See the RMarkdown that generated this file
- PDF looks great too!

1 Palmer Penguins

This example uses the *Palmer Penguins* data set: https://github.com/allisonhorst/palmerpenguins.

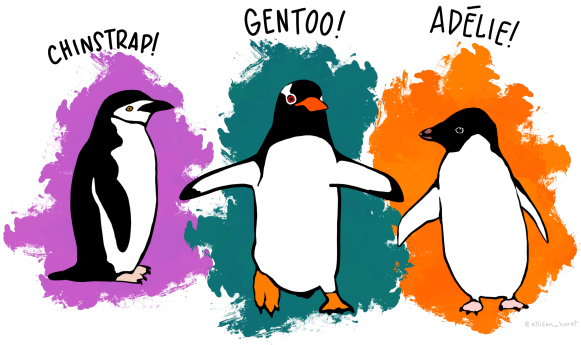

Figure 1: Palmer Penguins Illustration from @allison_horst

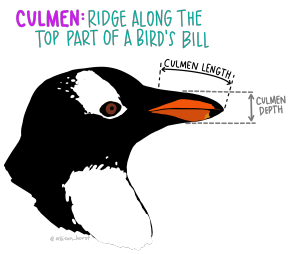

Figure 2: Illustration of Culmen

2 Get Data

```
library(palmerpenguins)

data("penguins")
```

3 Replay The Data Set (May Not Look So Great)

```
penguins
```

```
## # A tibble: 344 x 7
##    species island culmen_length_mm culmen_depth_mm flipper_length_~ body_mass_g
##    <fct>   <fct>             <dbl>           <dbl>             <int>       <int>
##  1 Adelie  Torge~             39.1            18.7               181        3750
##  2 Adelie  Torge~             39.5            17.4               186        3800
##  3 Adelie  Torge~             40.3            18                 195        3250
##  4 Adelie  Torge~             NA              NA                  NA          NA
##  5 Adelie  Torge~             36.7            19.3               193        3450
##  6 Adelie  Torge~             39.3            20.6               190        3650
##  7 Adelie  Torge~             38.9            17.8               181        3625
##  8 Adelie  Torge~             39.2            19.6               195        4675
##  9 Adelie  Torge~             34.1            18.1               193        3475
## 10 Adelie  Torge~             42              20.2               190        4250
## # ... with 334 more rows, and 1 more variable: sex <fct>
```

4 Descriptive Statistics

```
# summary(penguins)

# psych gives a good list of descriptive statistics

psych::describe(penguins)
```

```
##                    vars   n    mean     sd  median trimmed    mad    min    max
```

```
## species*             1 344    1.92   0.89    2.00    1.90   1.48    1.0    3.0
## island*              2 344    1.66   0.73    2.00    1.58   1.48    1.0    3.0
## culmen_length_mm     3 342   43.92   5.46   44.45   43.91   7.04   32.1   59.6
## culmen_depth_mm      4 342   17.15   1.97   17.30   17.17   2.22   13.1   21.5
## flipper_length_mm    5 342  200.92  14.06  197.00  200.34  16.31  172.0  231.0
## body_mass_g          6 342 4201.75 801.95 4050.00 4154.01 889.56 2700.0 6300.0
## sex*                 7 333    1.50   0.50    2.00    1.51   0.00    1.0    2.0
##                    range  skew kurtosis    se
## species*             2.0  0.16    -1.73  0.05
## island*              2.0  0.61    -0.91  0.04
## culmen_length_mm    27.5  0.05    -0.89  0.30
## culmen_depth_mm      8.4 -0.14    -0.92  0.11
## flipper_length_mm   59.0  0.34    -1.00  0.76
## body_mass_g       3600.0  0.47    -0.74 43.36
## sex*                 1.0 -0.02    -2.01  0.03
```

5 Use Pander To Format Our Summary Results

```
library(pander)

pander(psych::describe(penguins))
```

Table 1: Table continues below

	vars	n	mean	sd	median	trimmed	mad
species*	1	344	1.919	0.8933	2	1.899	1.483
island*	2	344	1.663	0.7262	2	1.58	1.483
culmen_length_mm	3	342	43.92	5.46	44.45	43.91	7.042
culmen_depth_mm	4	342	17.15	1.975	17.3	17.17	2.224
flipper_length_mm	5	342	200.9	14.06	197	200.3	16.31
body_mass_g	6	342	4202	802	4050	4154	889.6
sex*	7	333	1.505	0.5007	2	1.506	0

	min	max	range	skew	kurtosis	se
species*	1	3	2	0.1591	-1.732	0.04816
island*	1	3	2	0.6086	-0.9064	0.03915
culmen_length_mm	32.1	59.6	27.5	0.05265	-0.8931	0.2952
culmen_depth_mm	13.1	21.5	8.4	-0.1422	-0.9234	0.1068
flipper_length_mm	172	231	59	0.3427	-0.9992	0.7604
body_mass_g	2700	6300	3600	0.4662	-0.7395	43.36
sex*	1	2	1	-0.01794	-2.006	0.02744

6 Only Look At A Subset of Variables

```r
mynewdata <- subset(penguins, select = c(species,
                                         island,
                                         body_mass_g))

pander(psych::describe(mynewdata))
```

Table 3: Table continues below

	vars	n	mean	sd	median	trimmed	mad
species*	1	344	1.919	0.8933	2	1.899	1.483
island*	2	344	1.663	0.7262	2	1.58	1.483
body_mass_g	3	342	4202	802	4050	4154	889.6

	min	max	range	skew	kurtosis	se
species*	1	3	2	0.1591	-1.732	0.04816
island*	1	3	2	0.6086	-0.9064	0.03915
body_mass_g	2700	6300	3600	0.4662	-0.7395	43.36

7 "Hand Built" Table

Things	Outcome
Thing 1	A
Thing 2	B