

My Reproducible Manuscript

Leo Welma

```
library(ggplot2)
penguins <- read.csv("data.csv")
source("do_addition.R")
```

Meet Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see <https://quarto.org>.

Meet the penguins

The `penguins` data from the `palmerpenguins` package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica (Gorman, Williams, and Fraser 2014).

There are 152 Adelie penguins.

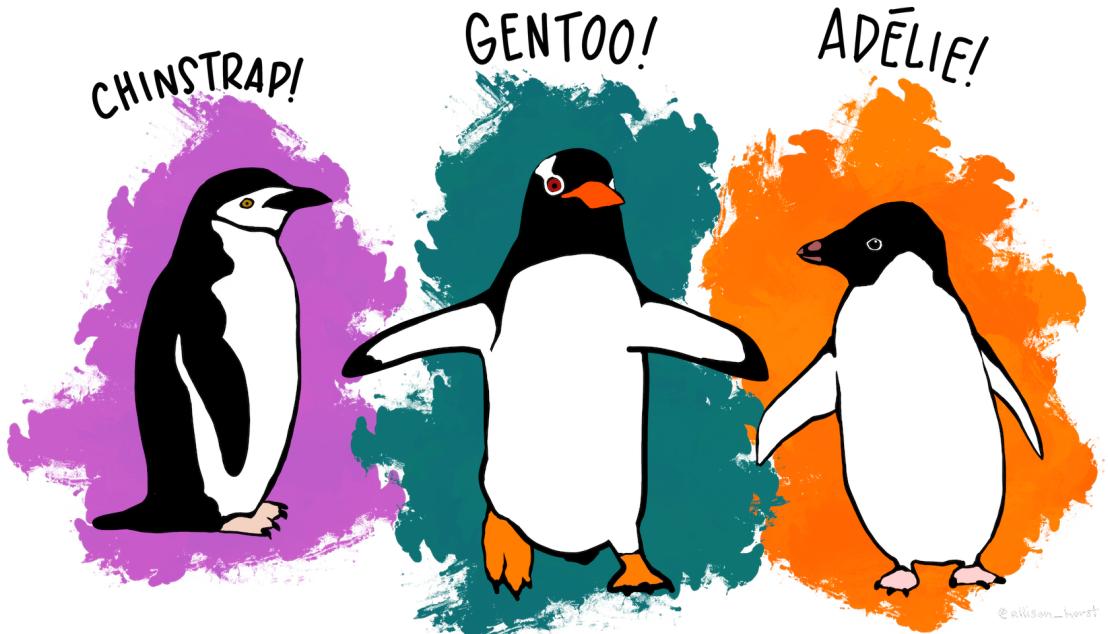
There are 124 Gentoo penguins.

There are 68 Chinstrap penguins.

```
adelie <- as.numeric(sum(grepl("Adelie", penguins$Species)))
gentoo <- as.numeric(sum(grepl("Gentoo", penguins$Species)))
chinstrap <- as.numeric(sum(grepl("Chinstrap", penguins$Species)))

total_penguins <- do_addition(do_addition(adelie, gentoo), chinstrap)
```

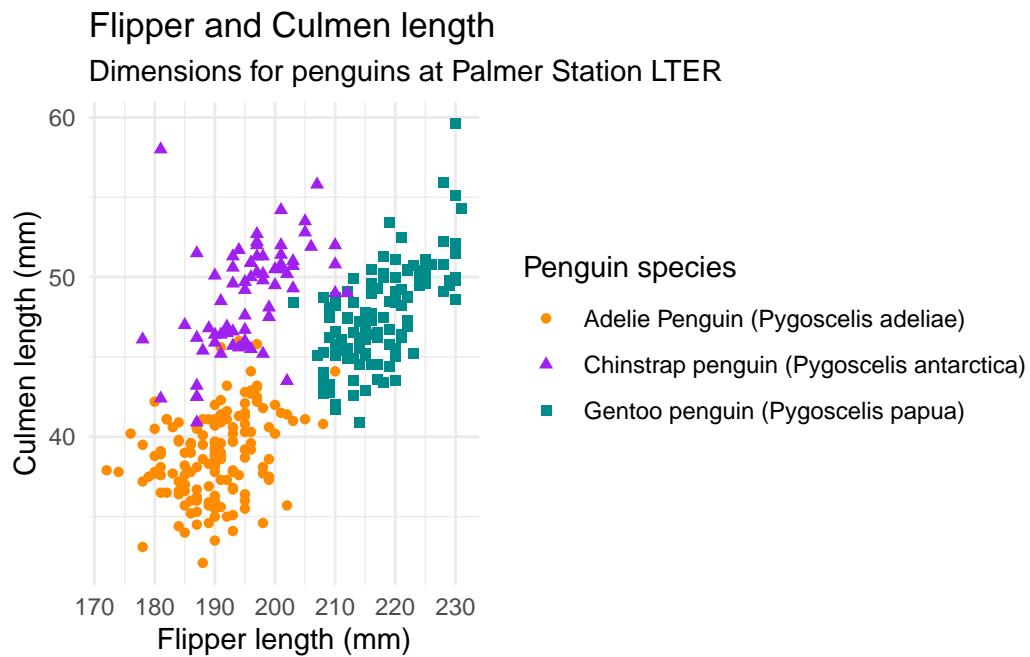
There are 344 penguins in total.



Results

```
ggplot(penguins, aes(x = `Flipper.Length..mm.` , y = `Culmen.Length..mm.`)) +  
  geom_point(aes(color = Species, shape = Species)) +  
  scale_color_manual(values = c("darkorange","purple","cyan4")) +  
  labs(  
    title = "Flipper and Culmen length",  
    subtitle = "Dimensions for penguins at Palmer Station LTER",  
    x = "Flipper length (mm)", y = "Culmen length (mm)",  
    color = "Penguin species", shape = "Penguin species"  
) +  
  theme_minimal()
```

Warning: Removed 2 rows containing missing values or values outside the scale range
(`geom_point()`).



References

Gorman, Kristen B., Tony D. Williams, and William R. Fraser. 2014. "Ecological Sexual Dimorphism and Environmental Variability Within a Community of Antarctic Penguins (Genus *Pygoscelis*).” Edited by André Chiaradia. *PLoS ONE* 9 (3): e90081. <https://doi.org/10.1371/journal.pone.0090081>.