

My Reproducible Manuscript

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Preparation

```
# Load penguins
library(ggplot2)
```

Warning: package 'ggplot2' was built under R version 4.4.3

```
# Read data
penguins <- read.csv("../data/data.csv")

#import function do_addtion from script
source("../scripts/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.

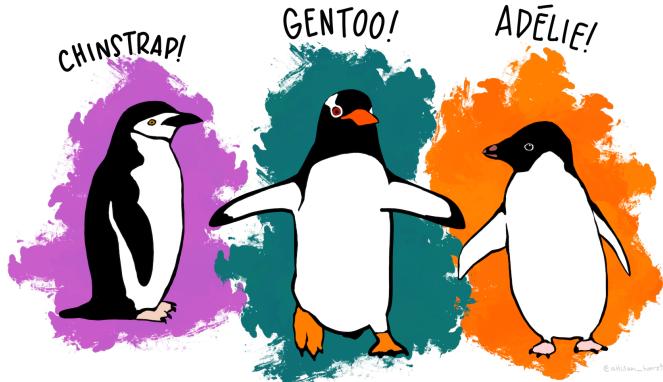


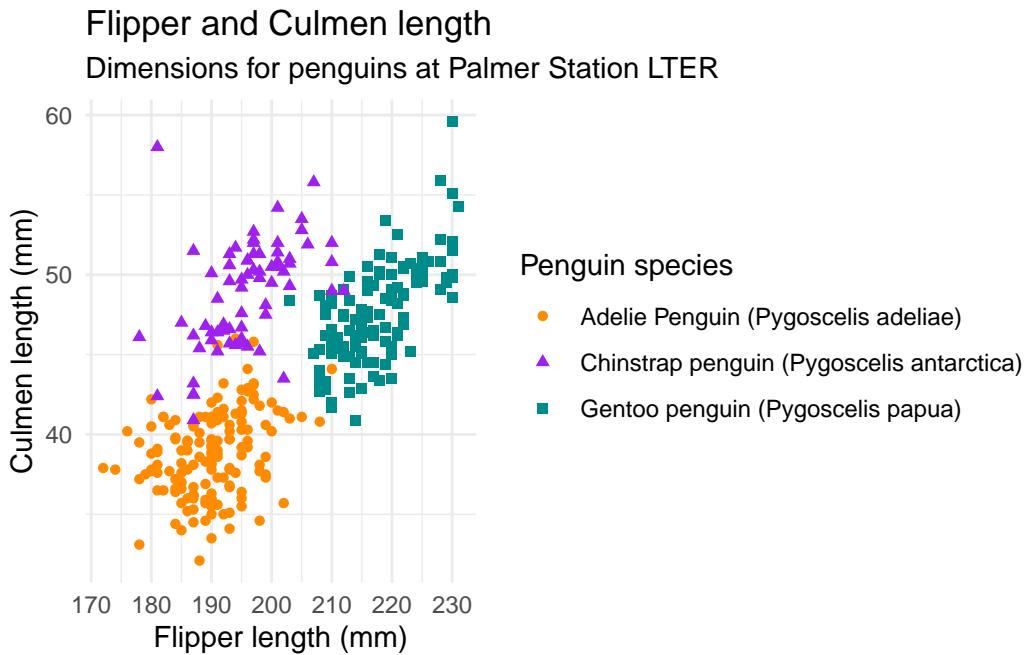
Figure 1: LTER penguins illustration by Allison Horst

Results

A nice little plot.

```
# Plot penguins
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()`).



In line code

Now we're going to calculate the sum of 25 and 25 using inline code: 50. Furthermore, we're going to report the number of observations in the penguins dataset for the "Chinstrap and Gentoo species repectively: 68,124.

Now for the most important calculation of them all. Flipper length! The average flipper length of all penguins is 200.92.

Testing the addition function

We can also use the addition function defined in the `do_addition.R` script to add two numbers together. For example, again adding 25 and 25 gives us 50. It works!

References

Here is a citation for the `palmerpenguins` package (Horst, Hill, and Gorman 2022).

Here's another citation (Chis-Ciure and Levin 2025)

Chis-Ciure, Robert, and Michael Levin. 2025. "Cognition All the Way down 2.0: Neuroscience Beyond Neurons in the Diverse Intelligence Era." *Synthese* 206 (5): 1–31.

Horst, Allison, Alison Hill, and Kristen B. Gorman. 2022. “Palmer Archipelago Penguins Data in the Palmerpenguins R Package - An Alternative to Anderson’s Irises.” *The R Journal* 14 (June): 244–54. <https://doi.org/10.32614/RJ-2022-020>.