

# Penguins\_Plot

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## Setting up my environment

Notes: Setting up my R environment by loading the 'tidyverse', and 'Palmer Penguins' packages.

```
library(tidyverse)
library(palmerpenguins)
library(ggplot2)
```

## View the data

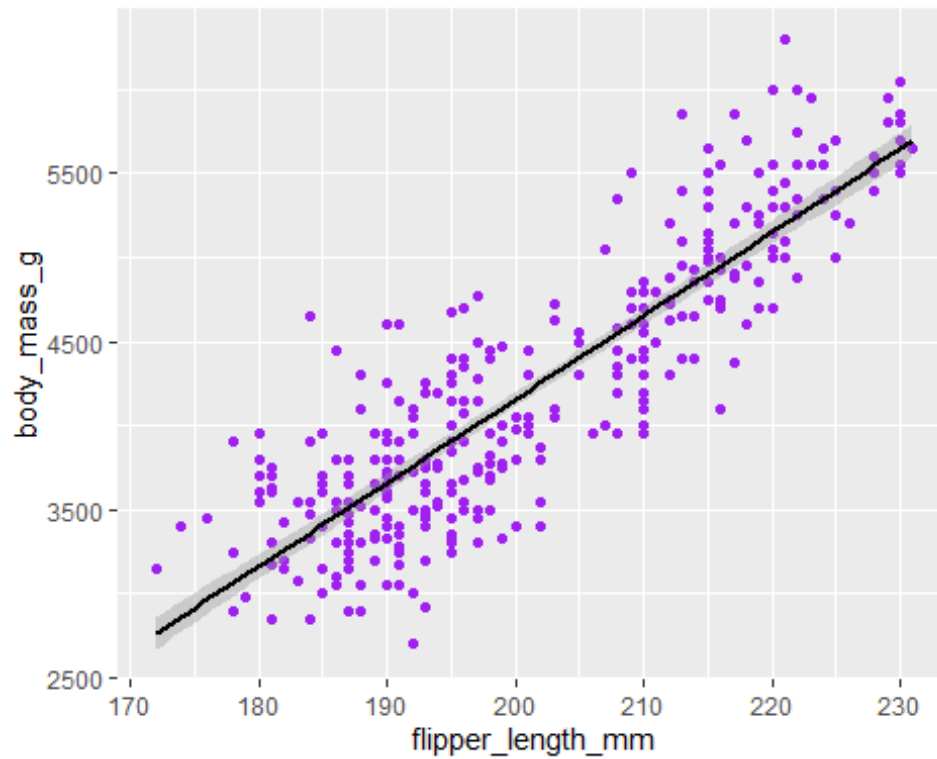
```
glimpse(penguins)

## Rows: 344
## Columns: 8
## $ species      <fct> Adelie, Adelie, Adelie, Adelie, Adelie, Adelie,
##               Adel~
## $ island       <fct> Torgersen, Torgersen, Torgersen, Torgersen,
##               Torgersen~
## $ bill_length_mm <dbl> 39.1, 39.5, 40.3, NA, 36.7, 39.3, 38.9, 39.2,
##               34.1, ~
## $ bill_depth_mm <dbl> 18.7, 17.4, 18.0, NA, 19.3, 20.6, 17.8, 19.6,
##               18.1, ~
## $ flipper_length_mm <int> 181, 186, 195, NA, 193, 190, 181, 195, 193, 190,
##               186~
## $ body_mass_g   <int> 3750, 3800, 3250, NA, 3450, 3650, 3625, 4675,
##               3475, ~
## $ sex           <fct> male, female, female, NA, female, male, female,
##               male~
## $ year          <int> 2007, 2007, 2007, 2007, 2007, 2007, 2007, 2007,
##               2007~
```

## Penguins Flipper and body mass comparison in purple

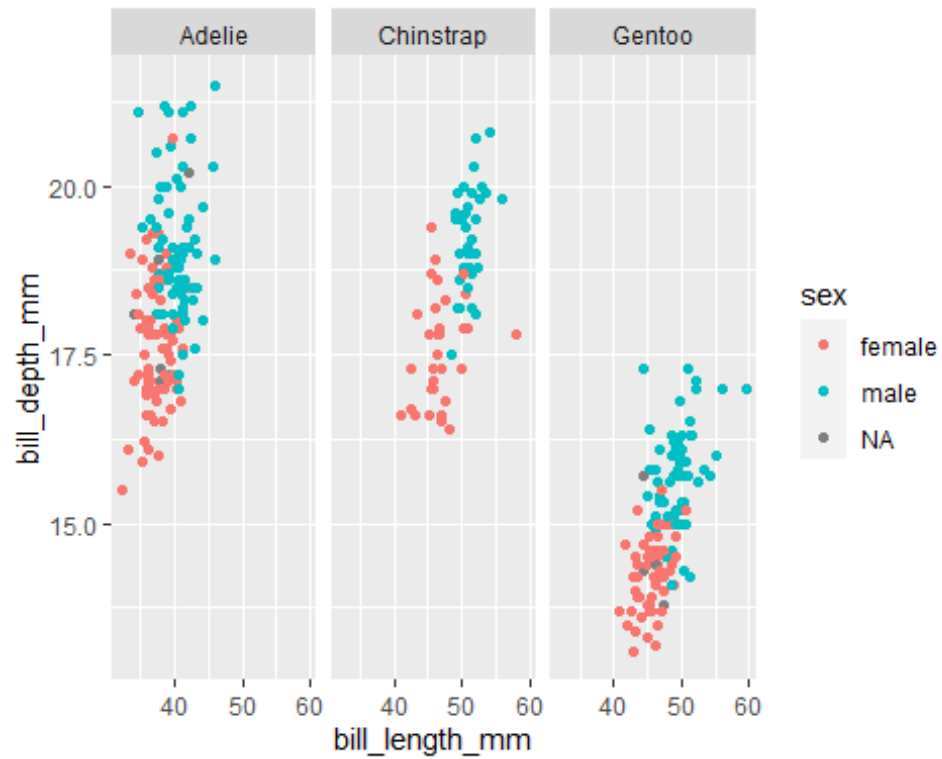
```
penguins %>%
  ggplot(aes(x=flipper_length_mm, y=body_mass_g))+
  geom_point(color="purple") + geom_smooth(method = lm, color = 'Black')

## `geom_smooth()` using formula 'y ~ x'
```



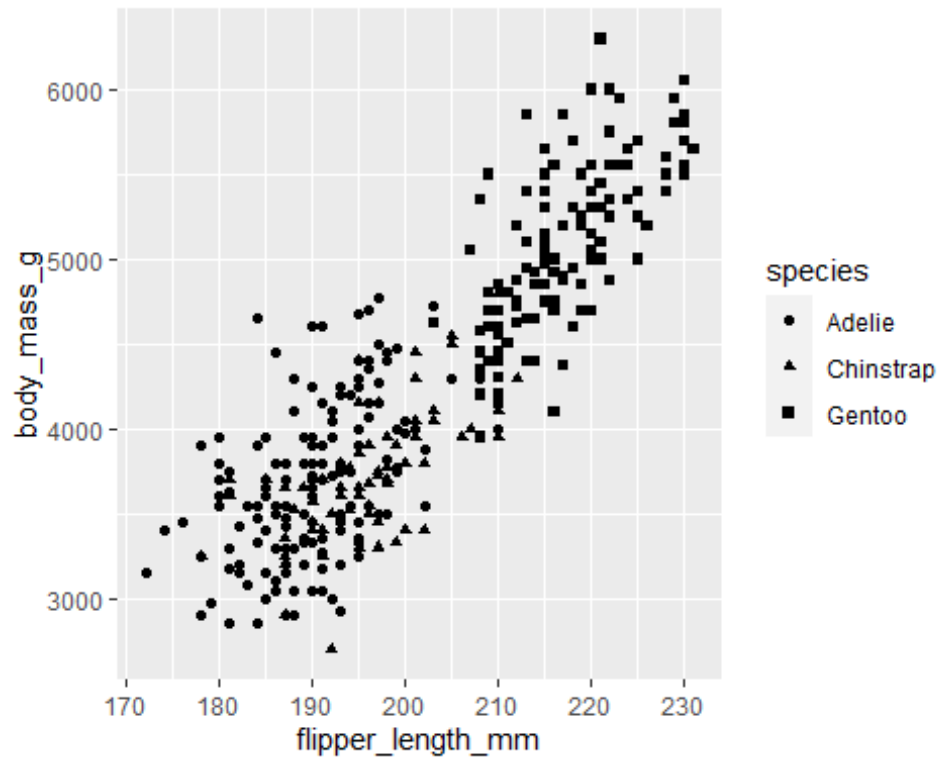
#### Bill length and bill depth by species and sex

```
penguins %>%  
  ggplot(aes(x=bill_length_mm, y=bill_depth_mm, color=sex))+  
  geom_point()+  
  facet_wrap(~species)
```



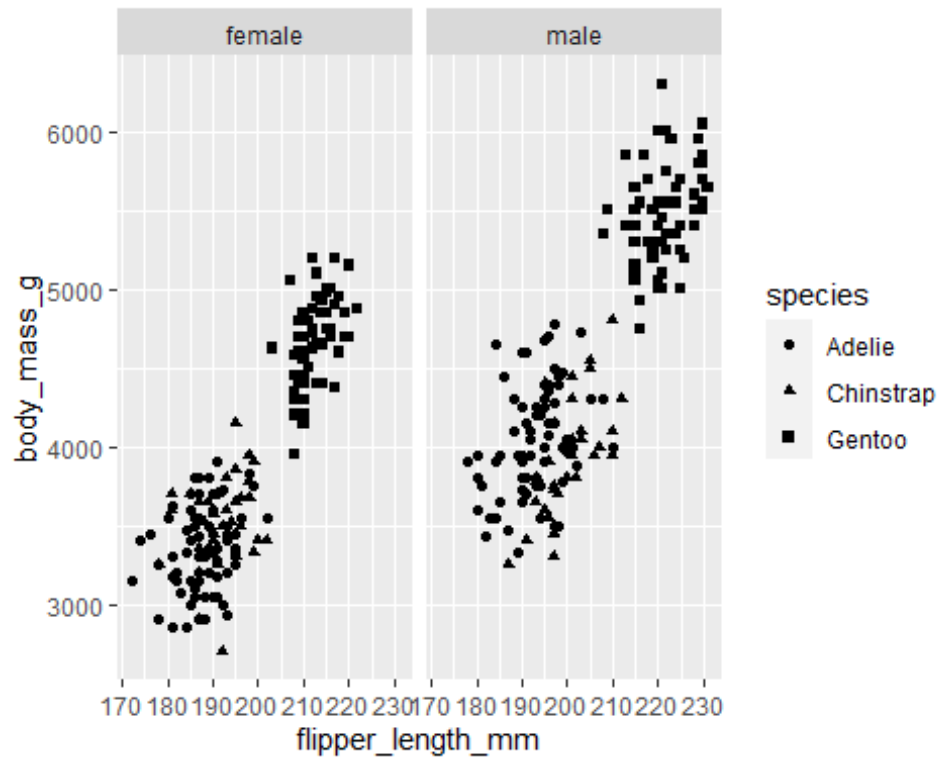
### Fliper and body mass by species

```
penguins %>%
  ggplot(aes(x=flipper_length_mm, y=body_mass_g, shape=species))+
  geom_point()
```



### Flipper and body mass by species and sex

```
penguins %>%  
  drop_na(sex) %>%  
  ggplot(aes(x=flipper_length_mm, y=body_mass_g, Color=sex, shape=species))+  
  geom_point()+  
  facet_wrap(~sex)
```



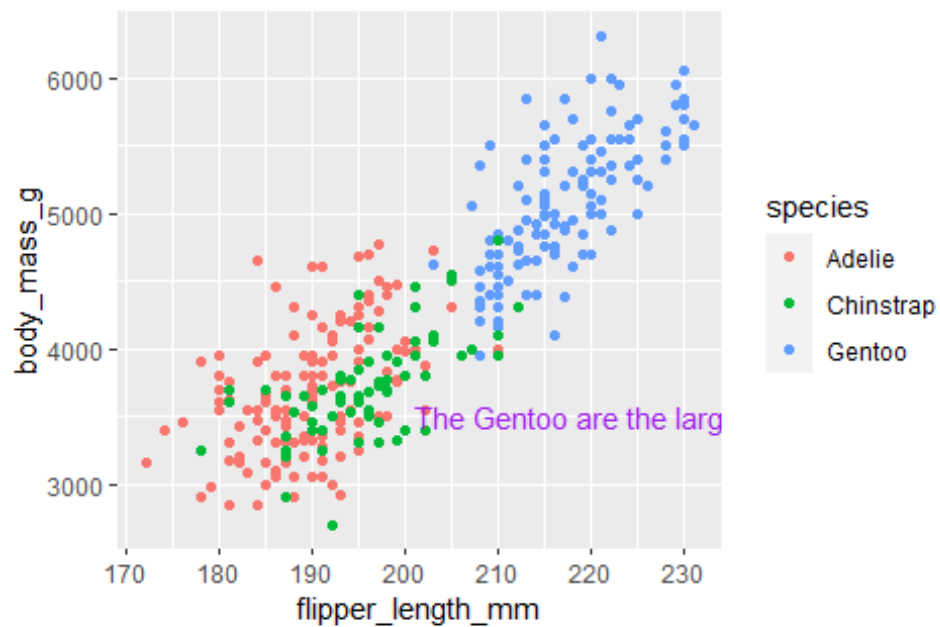
### Comparison of Three Species of Penguins

```
penguins %>%
  ggplot(aes(x=flipper_length_mm, y=body_mass_g, color= species))+
  geom_point()+
  labs(title = "Palmer Penguins: Body Mass vs, Flipper Length",
        subtitle = "Sample of Three Penguins",
        caption = "Data collected by Dr. Kristen Gorman") +
  annotate("text",x=220,y=3500, label="The Gentoo are the largest",
  color="purple")

## Warning: Removed 2 rows containing missing values (geom_point).
```

## Palmer Penguins: Body Mass vs, Flipper Length

Sample of Three Penguins



Data collected by Dr. Kristen Gorman