Palmer_Penguins

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Setting up my environment

Notes: Setting up my R environment by loading the 'tidyverse' and 'palmer penguins' packages

```
library(tidyverse)
```

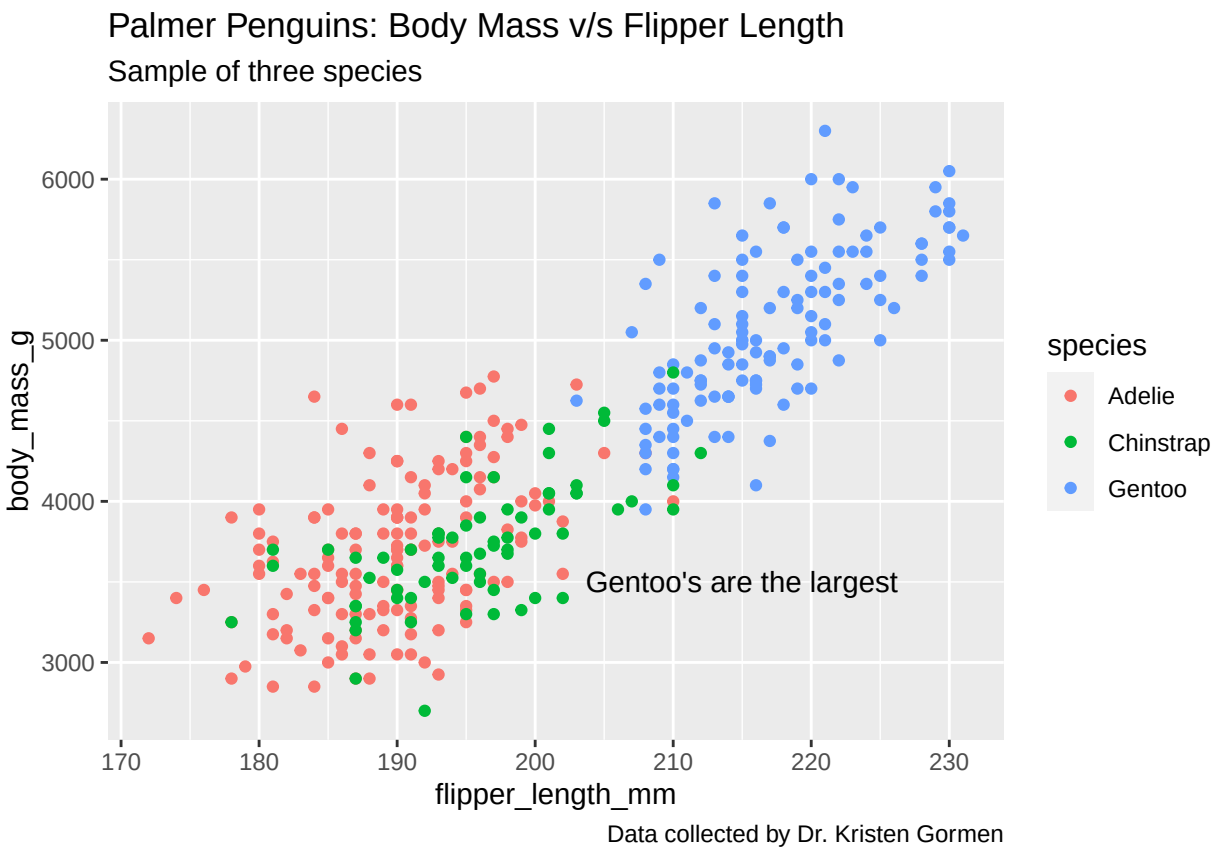
```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --

## v ggplot2 3.3.3     v purrr   0.3.4
## v tibble  3.1.0     v dplyr   1.0.5
## v tidyr   1.1.3     v stringr 1.4.0
## v readr   1.4.0     v forcats 0.5.1

## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

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

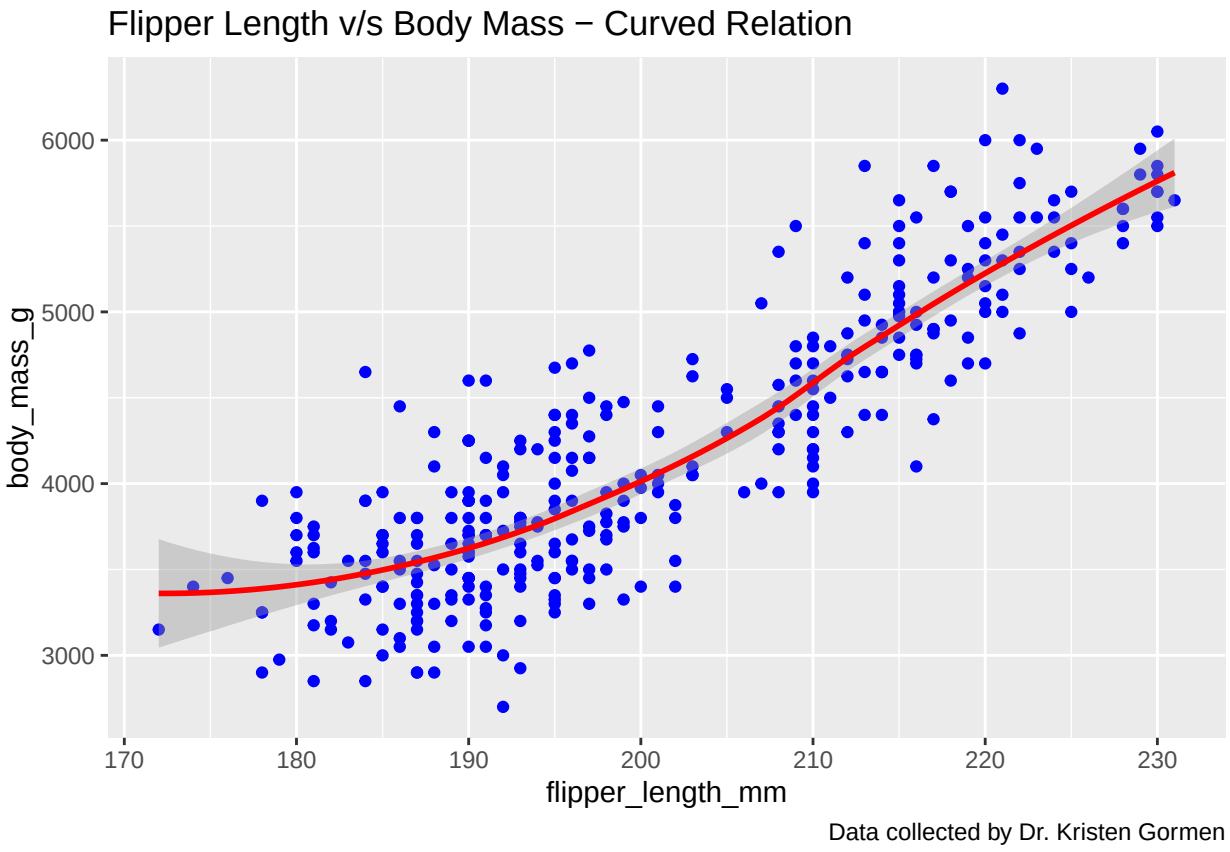
```
ggplot(data=penguins) +
  geom_point(mapping = aes(x=flipper_length_mm, y=body_mass_g, color=species)) +
  labs(title="Palmer Penguins: Body Mass v/s Flipper Length",
       subtitle="Sample of three species",
       caption="Data collected by Dr. Kristen Gormen") +
  annotate("text", x= 215, y= 3500, label= "Gentoo's are the largest")
```



The graph above has a Title, Subtitle, Caption and a Text annotation identifying the largest species.

```
ggplot(data=penguins) +
  geom_point(mapping=aes(x=flipper_length_mm, y=body_mass_g), color = "blue") +
  geom_smooth(mapping=aes(x=flipper_length_mm, y=body_mass_g), color = "red") +
  labs(title = "Flipper Length v/s Body Mass - Curved Relation",
       caption = "Data collected by Dr. Kristen Gormen")
```

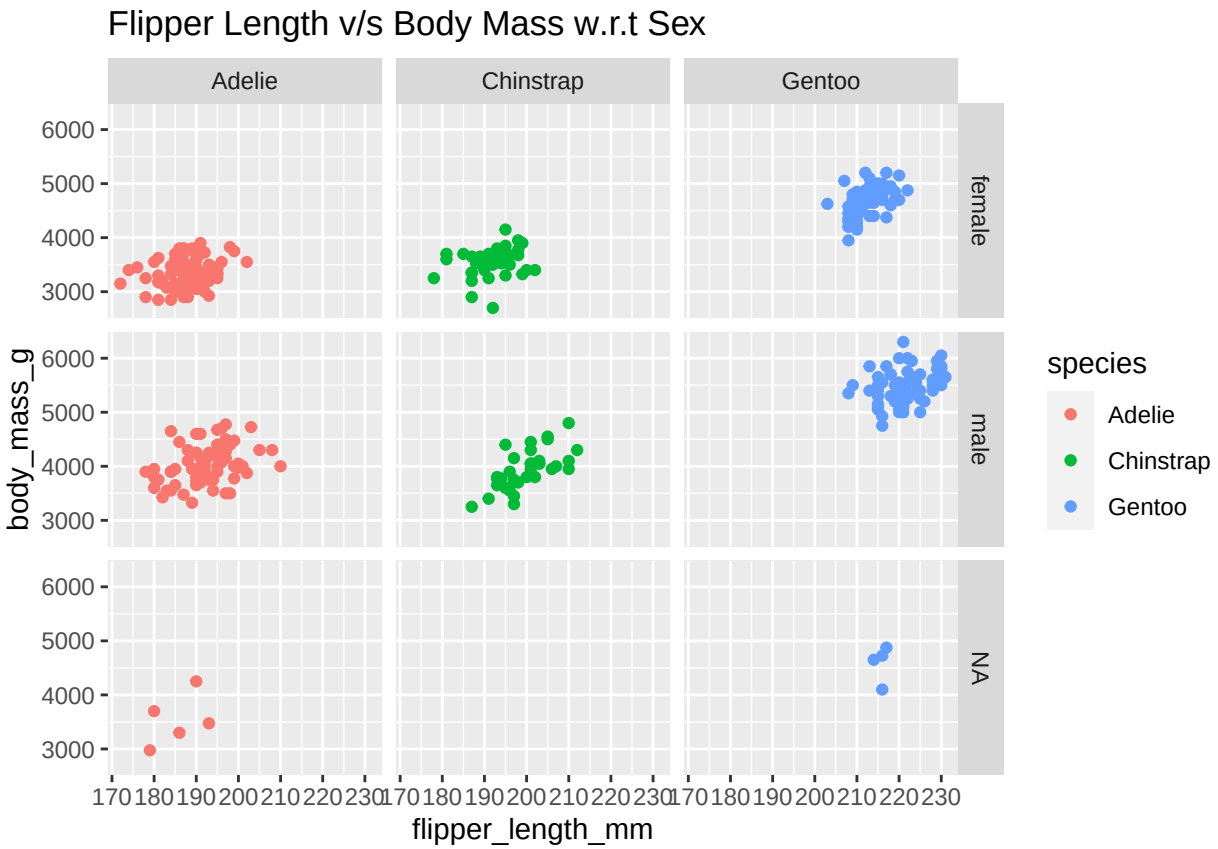
```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



Using Facet

The following graph shows the relation of flipper length and body mass with regards to the sex of penguins.

```
ggplot(data=penguins)+
  geom_point(mapping = aes(x= flipper_length_mm, y= body_mass_g, color= species))+
  facet_grid(sex~species)+
  labs(title= "Flipper Length v/s Body Mass w.r.t Sex")
```



Conclusion

The analysis above clearly states that regardless of the sex, a penguin's flipper length increases as the body mass goes up. This means that penguins grow larger in all aspects.