

# Penguins\_Species\_Visualisation

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## Loading Packages

```
library(tidyverse)

## -- Attaching packages ----- tidyverse 1.3.1 --
## v ggplot2 3.3.5     v purrr   0.3.4
## v tibble  3.1.6     v dplyr    1.0.8
## v tidyr   1.2.0     v stringr  1.4.0
## v readr   2.1.2     v forcats 0.5.1

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

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

## Viewing penguins Dataset

```
head(penguins)

## # A tibble: 6 x 8
##   species island bill_length_mm bill_depth_mm flipper_length_mm body_mass_g sex
##   <fct>   <fct>        <dbl>        <dbl>          <int>      <int> <fct>
## 1 Adelie   Torgo~       39.1        18.7           181       3750 male 
## 2 Adelie   Torgo~       39.5        17.4           186       3800 fema~
## 3 Adelie   Torgo~       40.3        18             195       3250 fema~
## 4 Adelie   Torgo~       NA          NA              NA        NA <NA>
## 5 Adelie   Torgo~       36.7        19.3           193       3450 fema~
## 6 Adelie   Torgo~       39.3        20.6           190       3650 male 
## # ... with 1 more variable: year <int>
```

## Summary of penguins dataset

```
summary(penguins)

##      species           island   bill_length_mm   bill_depth_mm
##  Adelie :152   Biscoe :168   Min.   :32.10   Min.   :13.10
##  Chinstrap: 68   Dream  :124   1st Qu.:39.23   1st Qu.:15.60
##  Gentoo  :124   Torgersen: 52   Median :44.45   Median :17.30
##                               Mean   :43.92   Mean   :17.15
```

```

##                                     3rd Qu.:48.50   3rd Qu.:18.70
##                                     Max.   :59.60   Max.   :21.50
##                                     NA's    :2       NA's    :2
## flipper_length_mm  body_mass_g      sex          year
## Min.   :172.0      Min.   :2700   female:165   Min.   :2007
## 1st Qu.:190.0      1st Qu.:3550   male   :168   1st Qu.:2007
## Median :197.0      Median :4050   NA's    :11    Median :2008
## Mean   :200.9      Mean   :4202                    Mean   :2008
## 3rd Qu.:213.0      3rd Qu.:4750                    3rd Qu.:2009
## Max.   :231.0      Max.   :6300                    Max.   :2009
## NA's    :2         NA's    :2

```

## Visualisation of penguins dataset

### Scatter Plot

```

ggplot(data = penguins)+  

  geom_point(mapping = aes(x = bill_length_mm, y = body_mass_g, color = species))+  

  labs(title = "Penguins_Bill_Length",  

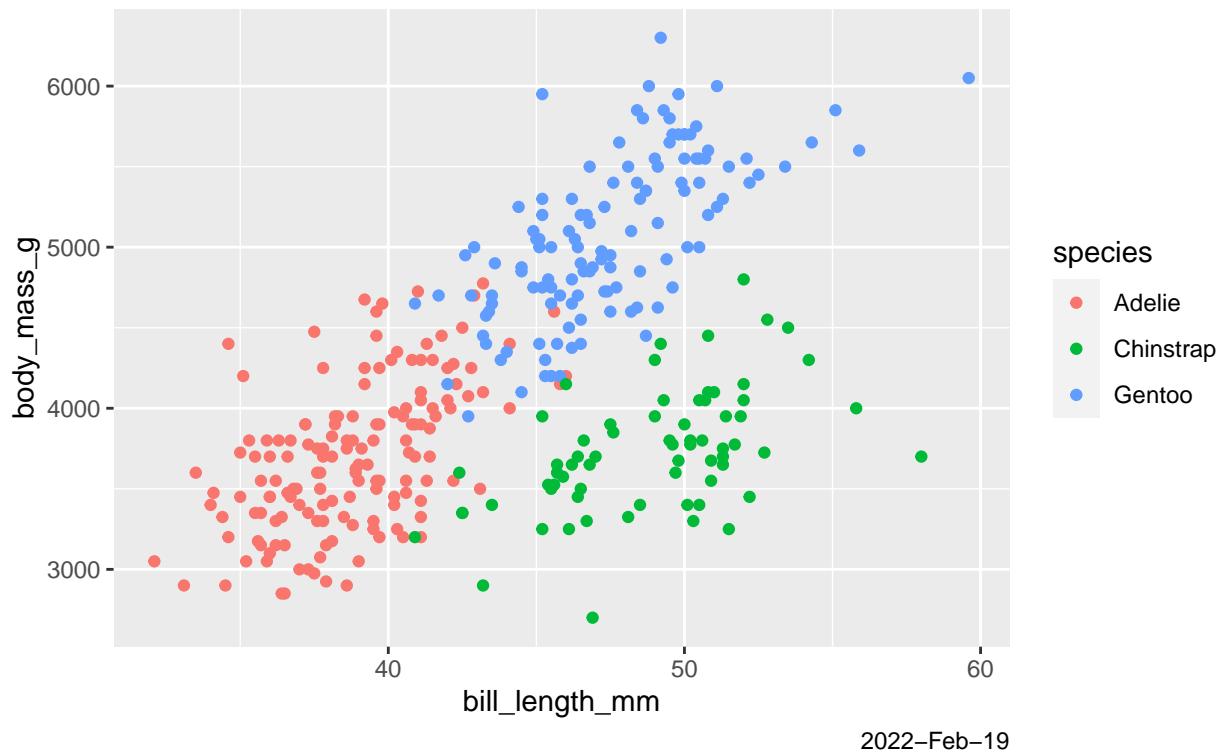
       subtitle = "Sactter Plot",  

       caption = "2022-Feb-19")

```

Penguins\_Bill\_Length

Sactter Plot



### Bar Chart

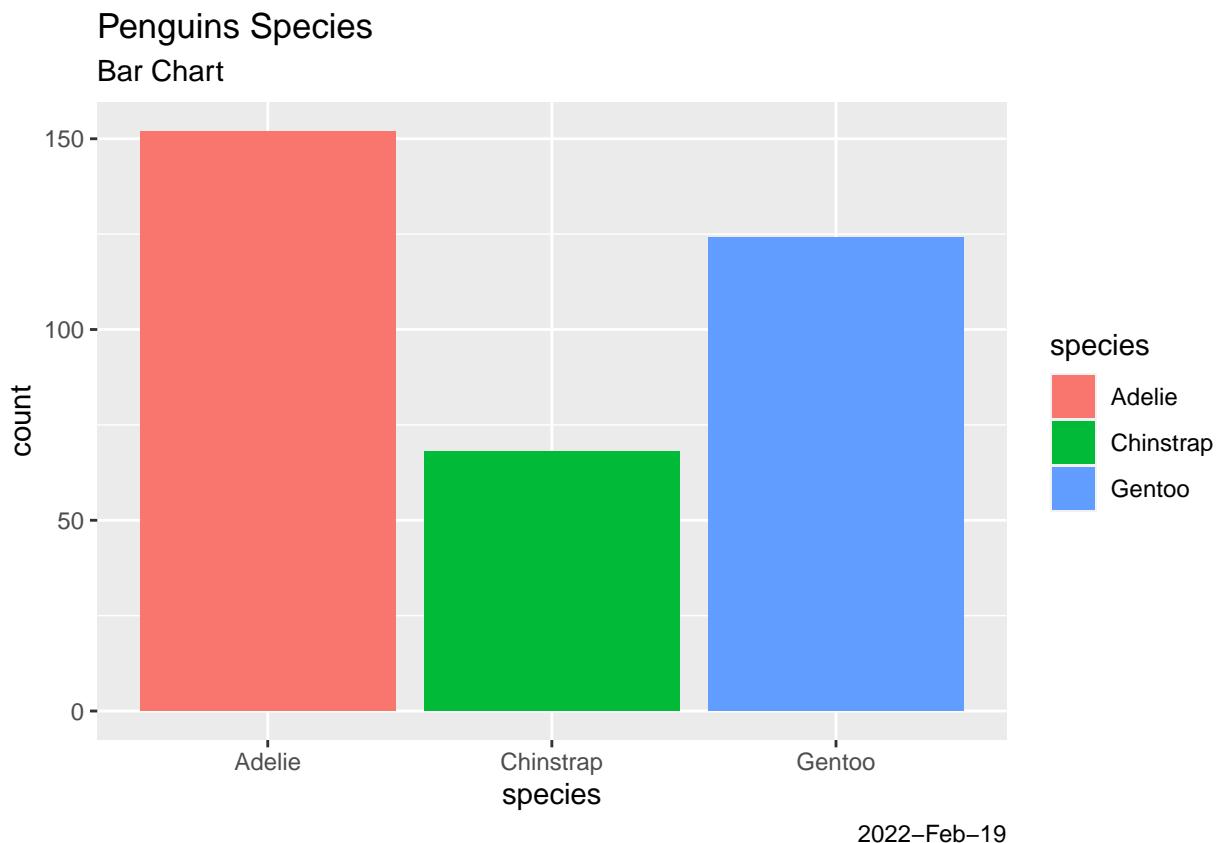
```

ggplot(data = penguins)+  

  geom_bar(mapping = aes(x = species, fill = species))+

```

```
labs(title = "Penguins Species",
     caption = "2022-Feb-19",
     subtitle = "Bar Chart")
```



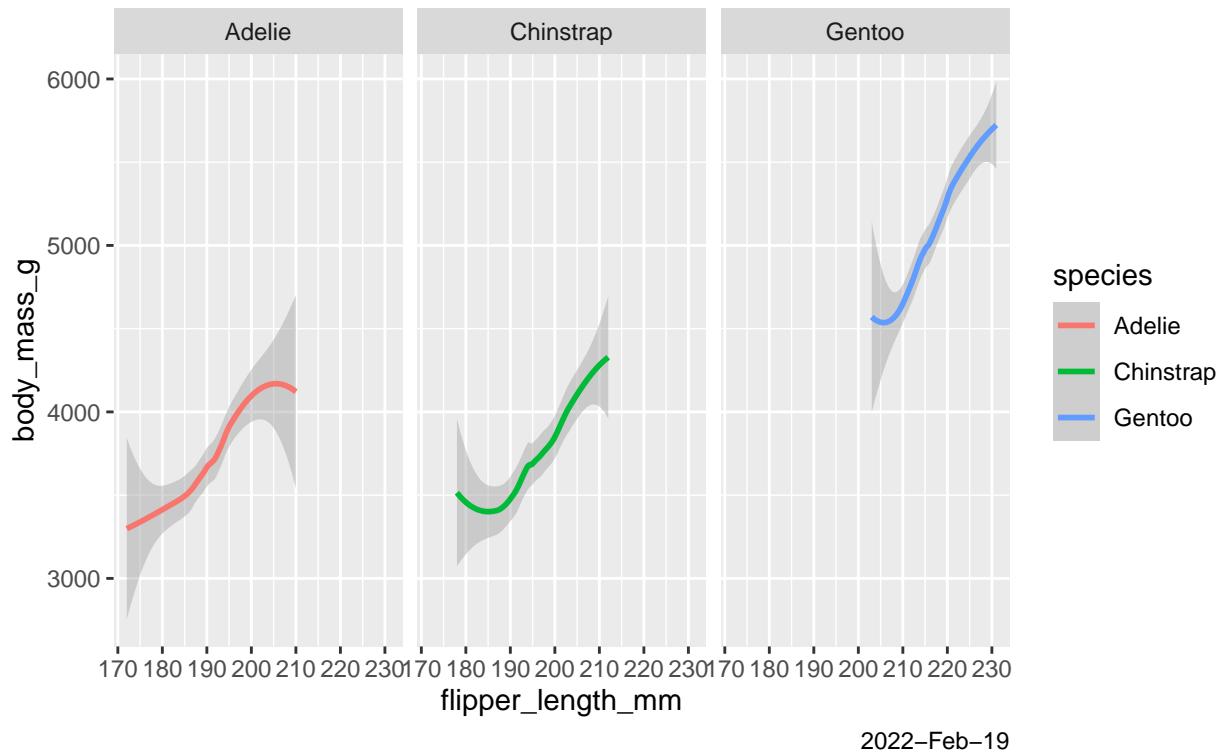
## Facet Function

```
ggplot(data = penguins) +
  geom_smooth(mapping = aes(x = flipper_length_mm, y = body_mass_g, color = species)) +
  facet_wrap(~species) +
  labs(title = "Penguins_Flipper_Length",
       subtitle = "Three Lines For Each",
       caption = "2022–Feb–19")
```

## `geom\_smooth()` using method = 'loess' and formula 'y ~ x'

## Penguins\_Flipper\_Length

Three Lines For Each



This data is of penguin species data, which I visualised in three different charts with different columns, showing which species has different lengths such as flipper, bill, and body mass.