

Penguins_Species_Visualisation

Prateek Singh

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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_~ body_mass_g sex
##   <fct>   <fct>         <dbl>         <dbl>         <int>         <int> <fct>
## 1 Adelie  Torge~           39.1           18.7           181           3750 male
## 2 Adelie  Torge~           39.5           17.4           186           3800 fema~
## 3 Adelie  Torge~           40.3            18           195           3250 fema~
## 4 Adelie  Torge~            NA            NA            NA            NA <NA>
## 5 Adelie  Torge~           36.7           19.3           193           3450 fema~
## 6 Adelie  Torge~           39.3           20.6           190           3650 male
## # ... with 1 more variable: year <int>
```

Summary of penguins dataset

```
summary(penguins)

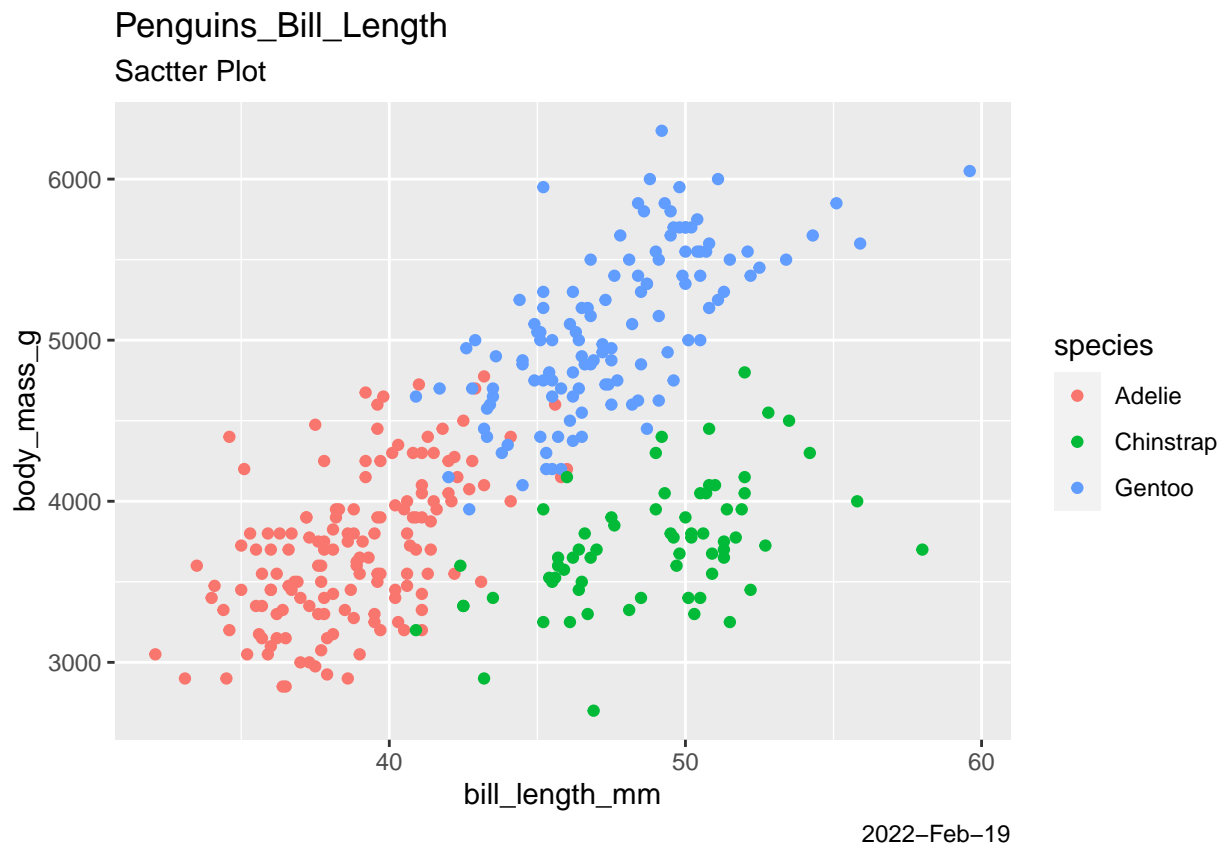
##      species      island  bill_length_mm  bill_depth_mm
##  Adelie    :152  Biscoe    :168   Min.    :32.10   Min.    :13.10
##  Chinstrap: 68   Dream     :124   1st Qu.:39.23   1st Qu.:15.60
##  Gentoo    :124  Torgersen: 52   Median :44.45   Median :17.30
##                                     Mean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

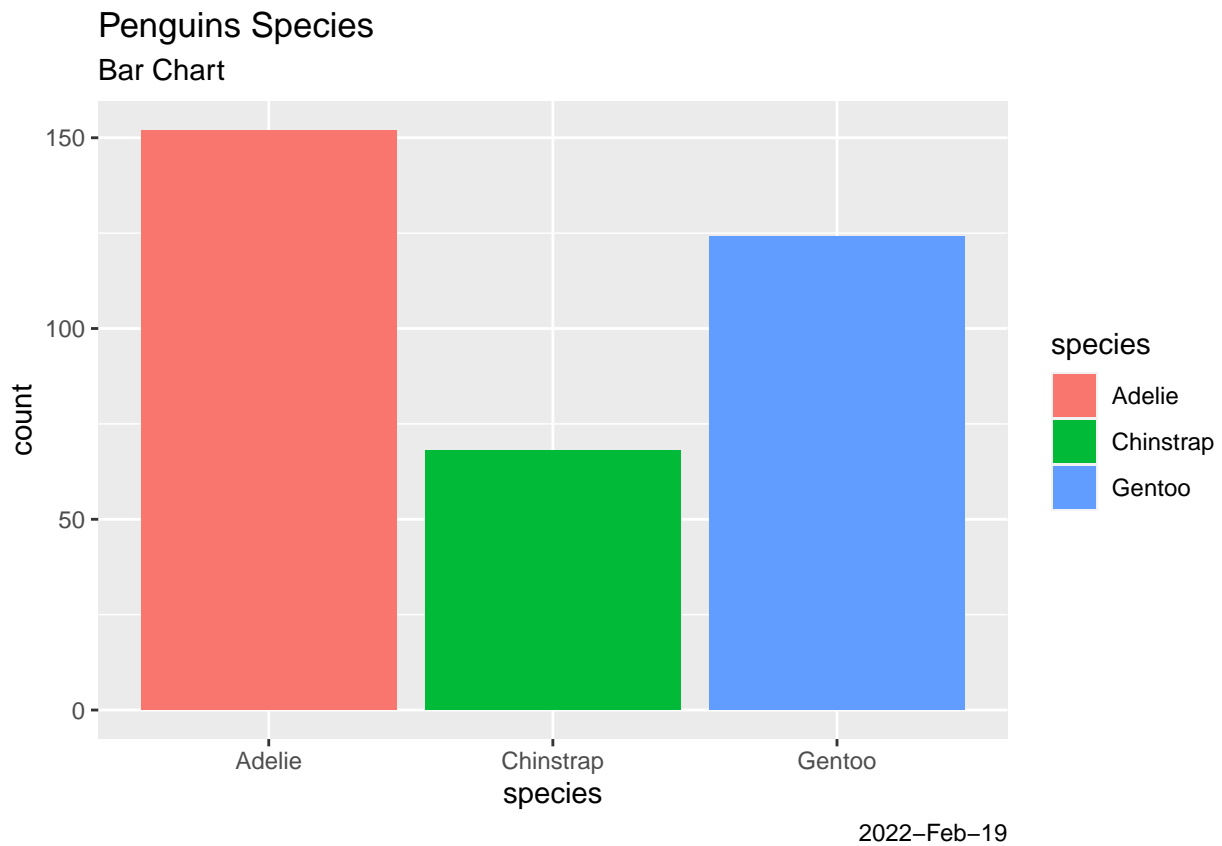
```
ggplot(data = penguins)+
  geom_point(mapping = aes(x = bill_length_mm, y = body_mass_g, color = species))+
  labs(title = "Penguins_Bill_Length",
       subtitle = "Sactter Plot",
       caption = "2022-Feb-19")
```



Bar Chart

```
ggplot(data = penguins)+
  geom_bar(mapping = aes(x = species, fill = species))+
```

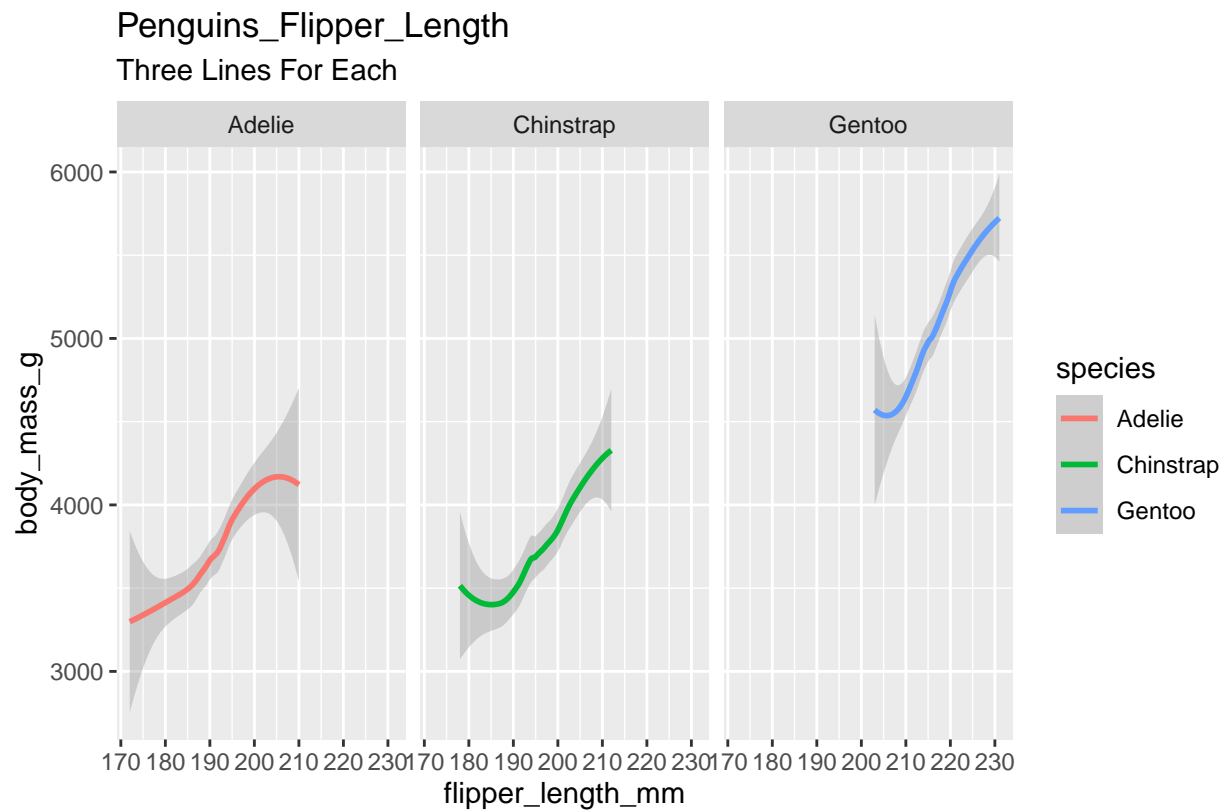
```
labs(title = "Penguins Species",
      caption = "2022-Feb-19",
      subtitle = "Bar Chart")
```



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'
```



2022-Feb-19

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.