

1. Data visualization

2024-07-10

```
library(ggplot2)
library(ggthemes)

custom_ggplot <- function(...) {
  ggplot(...) + scale_color_colorblind()
}

theme_set(theme_few())
set.seed(123)
```

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

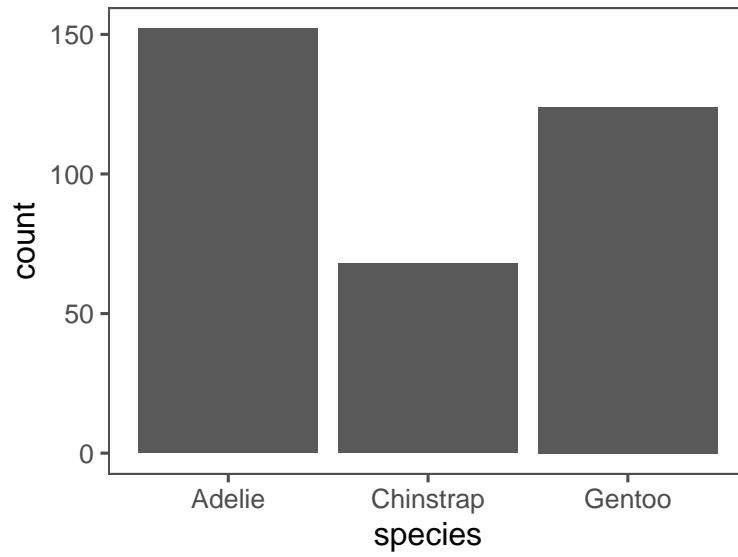
```
glimpse(penguins)
```

```
## Rows: 344
## Columns: 8
## $ species      <fct> Adelie, Adelie, Adelie, Adelie, Adelie, Adelie, Adel~
## $ island       <fct> Torgersen, Torgersen, Torgersen, Torgersen, Torgerse~
## $ 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~
```

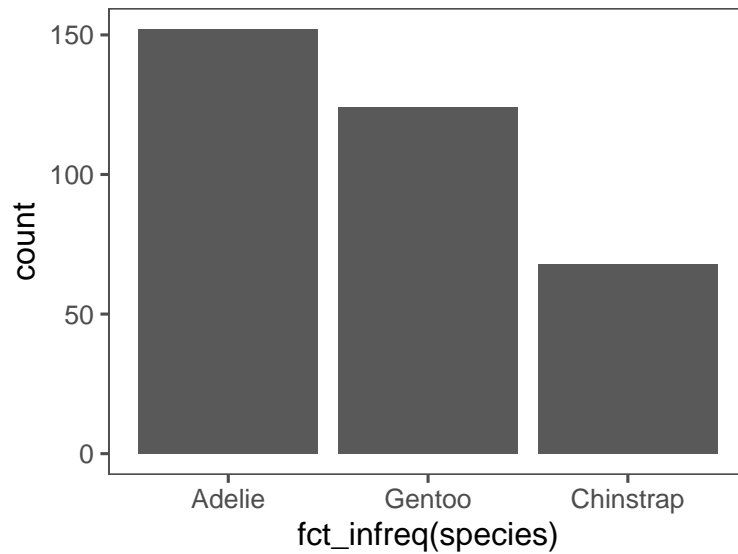
1.4 Visualizing distributions

A categorical variable

```
custom_ggplot(penguins, aes(x = species)) + geom_bar()
```

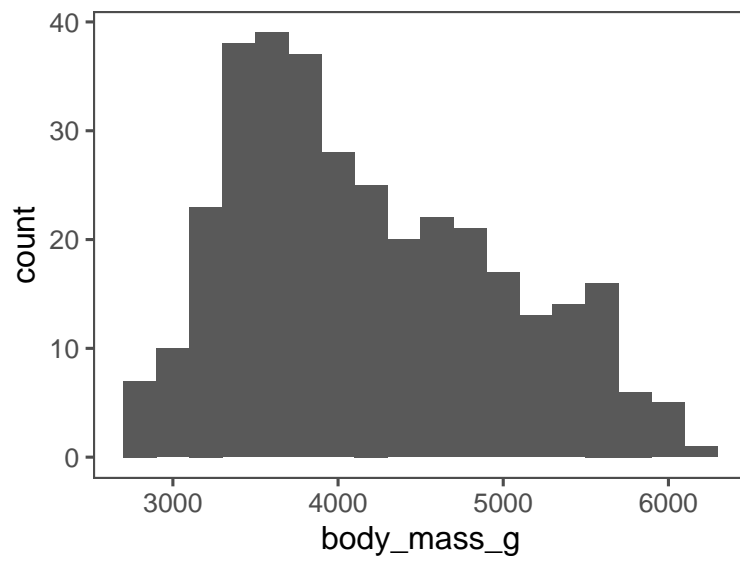


```
custom_ggplot(penguins, aes(x = fct_infreq(species))) + geom_bar()
```



A numerical variable

```
custom_ggplot(penguins, aes(x = body_mass_g)) + geom_histogram(binwidth = 200)
```



4