

GGPLOT Review

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GGplot Review

Learning objectives

- GGPlot
 - Mapping your dataframe columns to axes
 - Choosing a geometry for different visualizations
 - Modifying plot specifics

GGPlot Basic structure

What are the 3 minimum parts to make a plot using ggplot2?

```
ggplot(..., aes(...)) + ...  
  /\      /\      /\  
  1.      2.      3.
```

Give a description and example for each:

- 1.
- 2.
- 3.

Constructing plots

Look at this plot of data from *mpg*:

Answer these questions:

1. What are the axes?
2. What aesthetics are mapped?
3. What is the geometry?

```
# Reproduce the inline graph using the mpg dataset and ggplot2
```

```
# uncomment: ggplot(..., aes(...)) + ...
```

Another graph, this time using the births data

Read-in US Births data again.

```
usb = read.csv("https://github.com/Colorado-State-University-CMB/CM515-course-2025/raw/refs/heads/main/1")
```

```
ggplot(usb, aes(x=day_of_week, y=births)) + geom_jitter() + ggtitle("US births data")
```

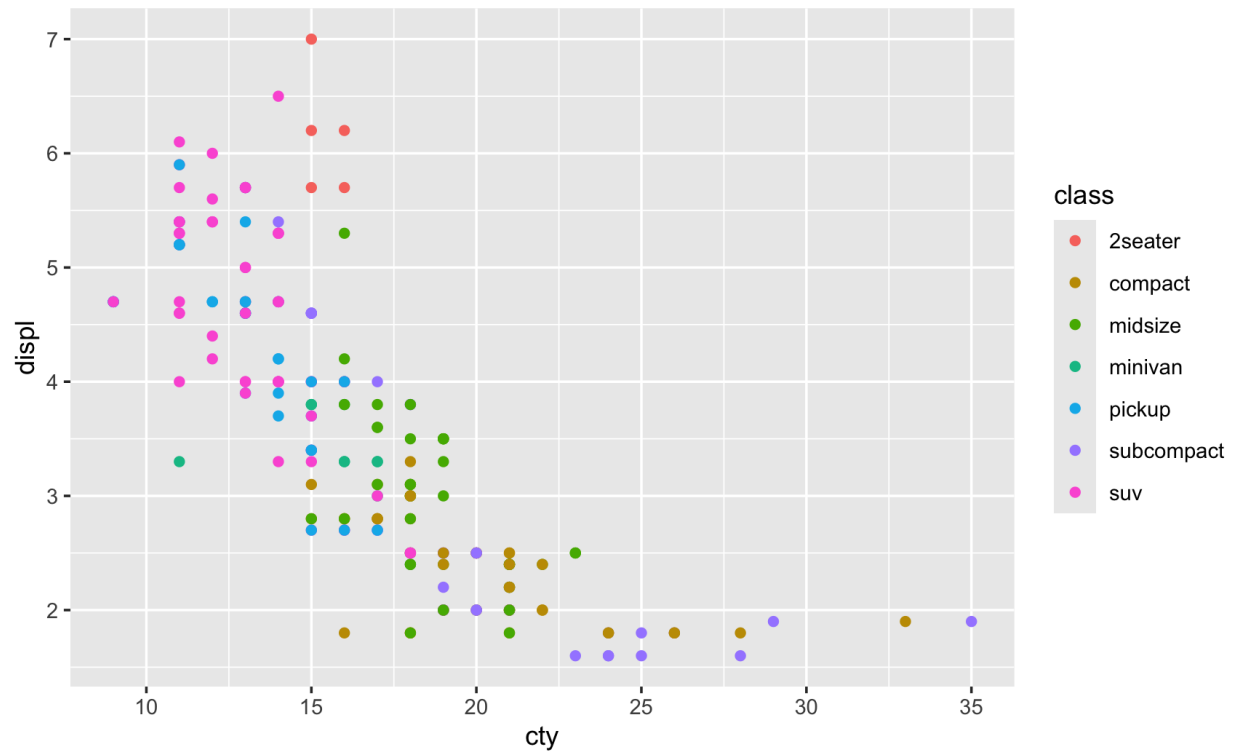
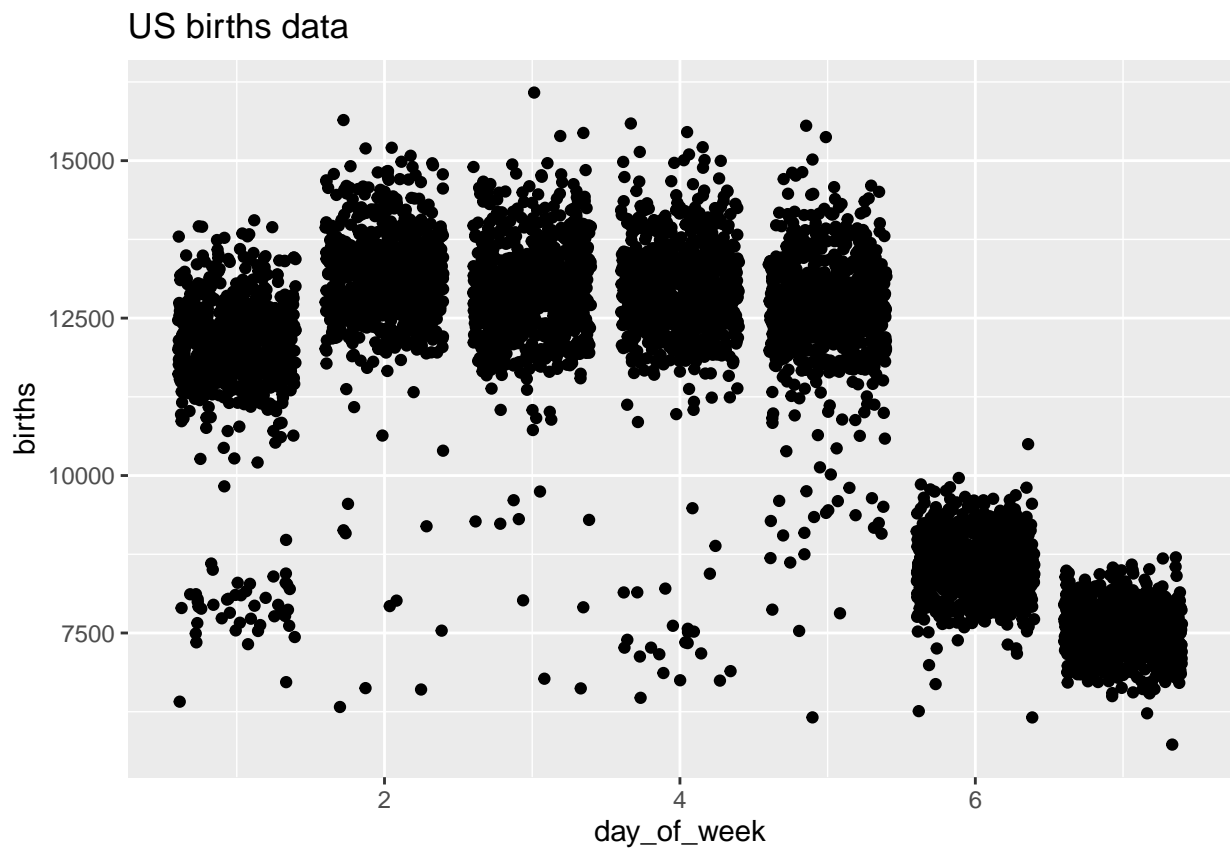


Figure 1: Plot of MPG data



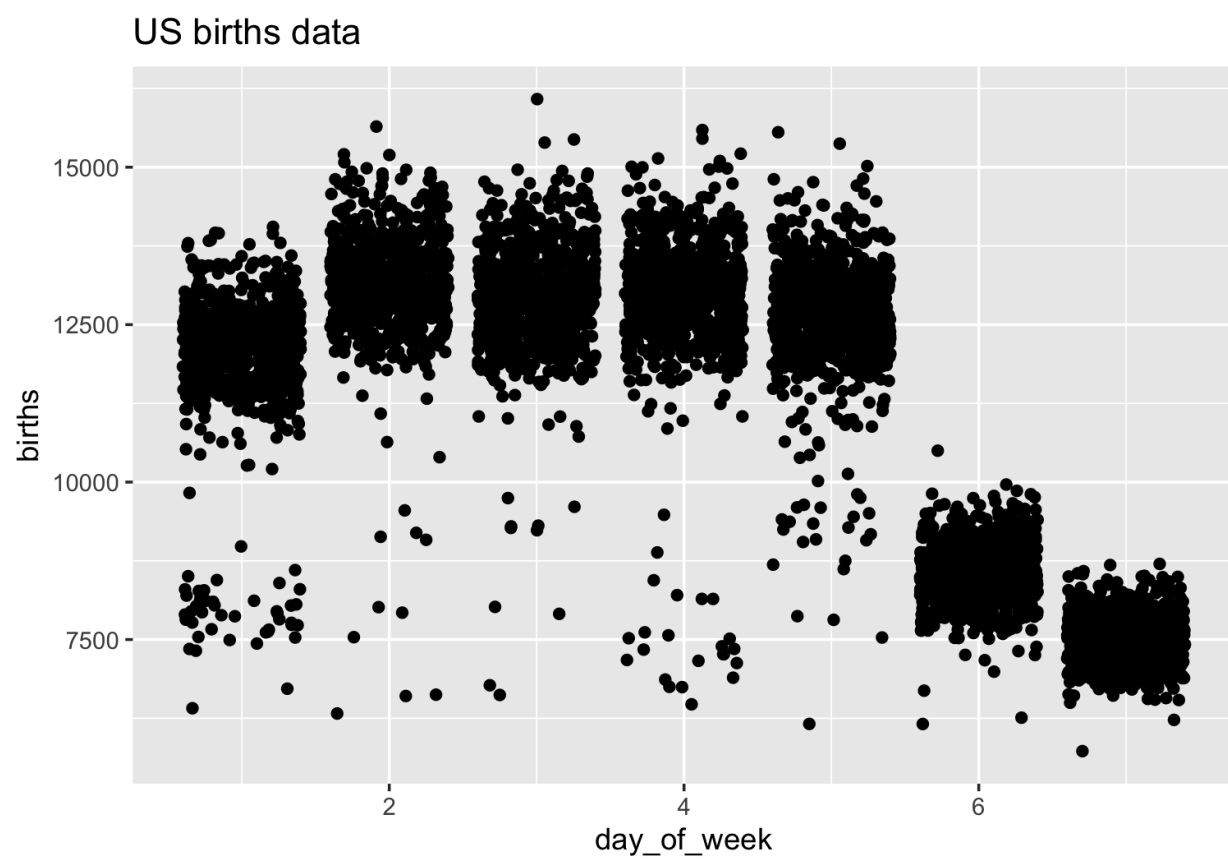


Figure 2: Plot of US births data