

Homework 1

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```
library(knitr)
opts_chunk$set(message = FALSE, error = TRUE, fig.pos = 'H',
tidy.opts=list(width.cutoff=65), tidy=TRUE, fig.path='figs/', cache.path='cache/graphics-',
fig.pos = 'H', fig.align='center', fig.width = 5, fig.height = 4,
fig.show = 'hold',
cache = TRUE, par = TRUE)

install.packages("tidyverse", repos = "https://cran.rstudio.com/")

##
##   There is a binary version available but the source version is
##   later:
##           binary source needs_compilation
## tidyverse 1.1.1 1.2.1                FALSE

library(tidyverse)
install.packages("gapminder", repos = "https://cran.rstudio.com/")

##
## The downloaded binary packages are in
## /var/folders/_x/xwtgvqzn39qbq704v4zwhk80000gp/T//Rtmp01j02B/downloaded_packages

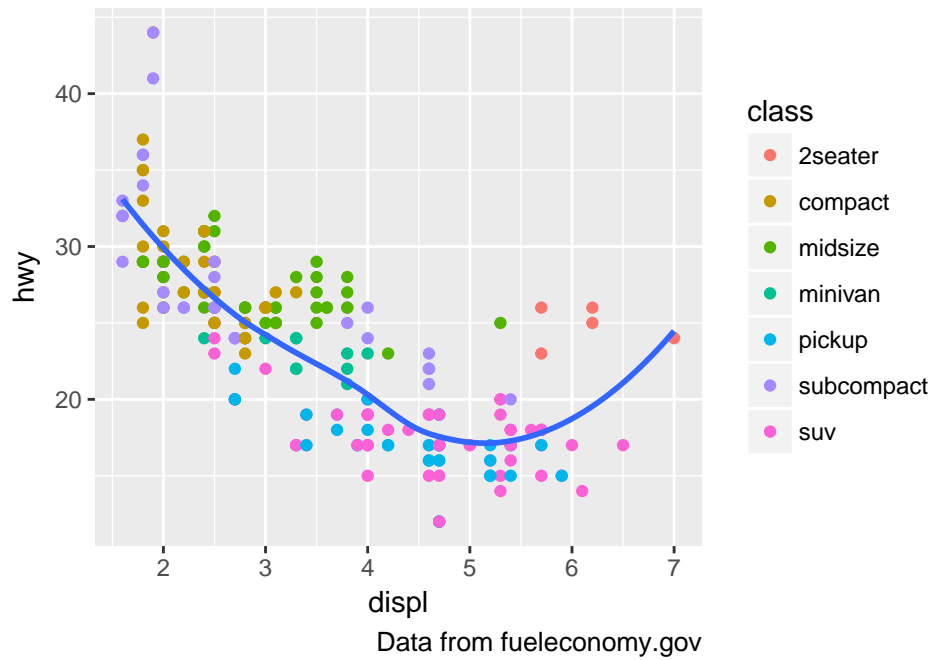
library(gapminder)

##Plot 1

data(mpg)
p <- ggplot(data = mpg, mapping = aes(x = displ, y = hwy))
p + geom_point(mapping = aes(color = class)) + geom_smooth(se = FALSE) +
  labs(title = "Fuel efficiency generally decreases with engine size",
        subtitle = "Two seaters (sports cars) are an exception because of their light weight",
        caption = "Data from fueleconomy.gov")
```

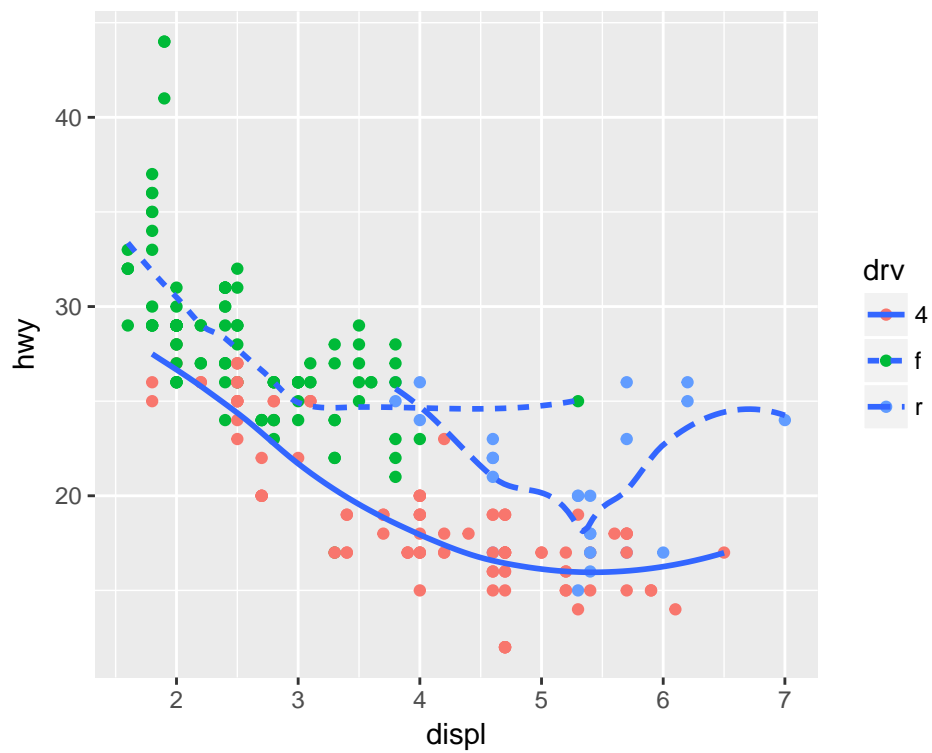
Fuel efficiency generally decreases with engine size

Two seaters (sports cars) are an exception because of their light weight



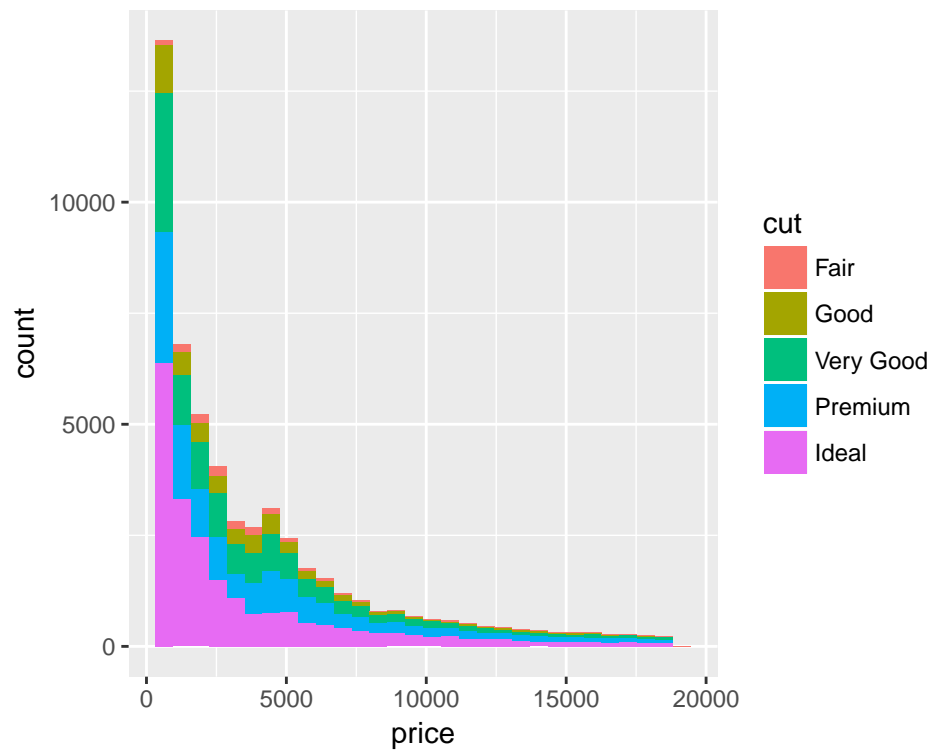
##Plot 2

```
p <- ggplot(data = mpg, mapping = aes(x = displ, y = hwy))
p + geom_point(mapping = aes(color = drv, fill = drv)) + geom_smooth(mapping = aes(linetype = drv),
  se = FALSE)
```



##Plot 3

```
data(diamonds)
p <- ggplot(data = diamonds, mapping = aes(x = price, fill = cut))
p + geom_histogram()
```



##Plot 4

```
p <- ggplot(data = diamonds, mapping = aes(x = carat, y = price))
p + geom_smooth() + facet_grid(cut ~ color)
```

