Homework data viz

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Homework

Explore data

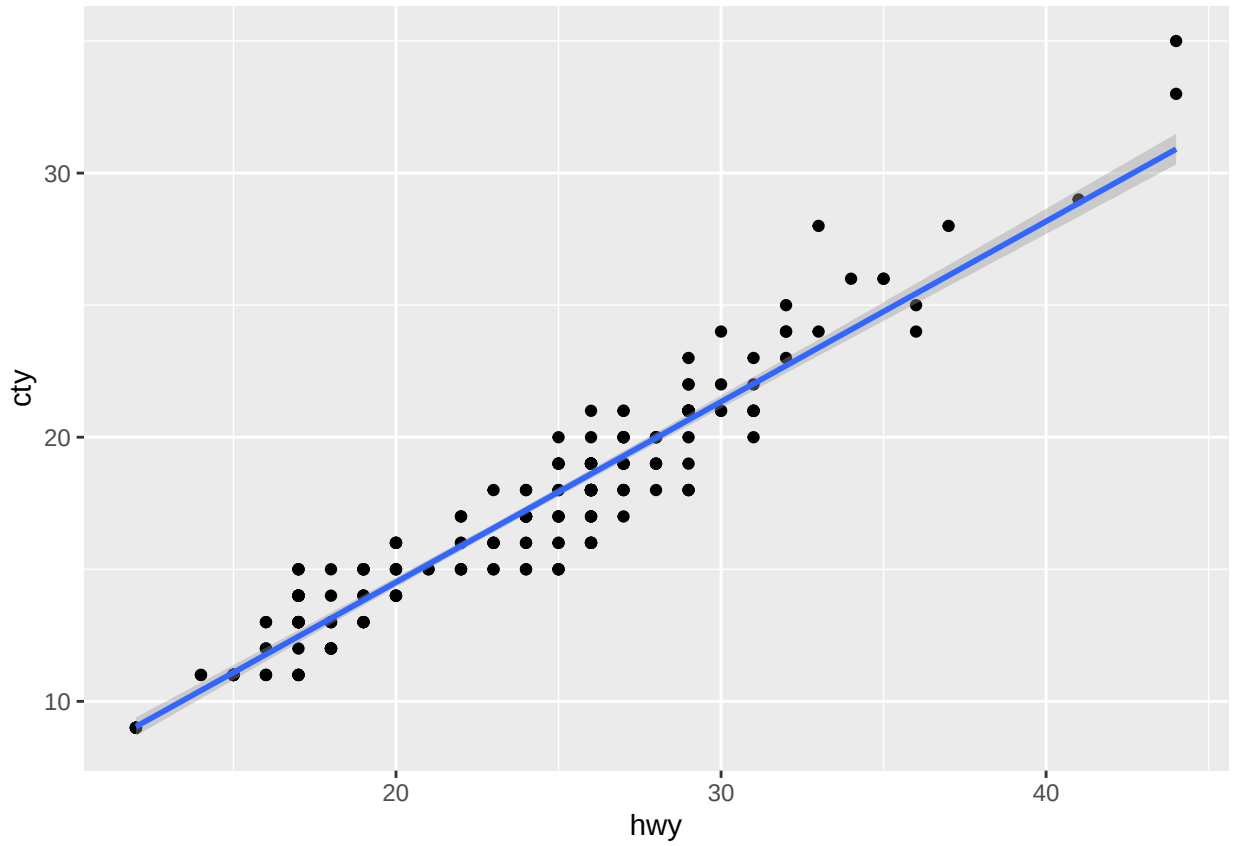
```
## # A tibble: 6 x 11
##   manufacturer model displ  year   cyl trans      drv     cty   hwy fl    class
##   <chr>        <chr> <dbl> <int> <int> <chr>      <chr> <int> <int> <chr> <chr>
## 1 audi         a4      1.8  1999     4 auto(l5)   f        18    29 p     compa~
## 2 audi         a4      1.8  1999     4 manual(m5) f        21    29 p     compa~
## 3 audi         a4      2    2008     4 manual(m6) f        20    31 p     compa~
## 4 audi         a4      2    2008     4 auto(av)   f        21    30 p     compa~
## 5 audi         a4      2.8  1999     6 auto(l5)   f        16    26 p     compa~
## 6 audi         a4      2.8  1999     6 manual(m5) f        18    26 p     compa~
```

1. Two Variables [Both continuous]

The relationship between hwy(highway miles per gallon) and cty(city miles per gallon) [The more hwy, the more cty]

```
ggplot(mpg, aes(hwy, cty)) +
  geom_point() +
  geom_smooth(method = "lm")
```

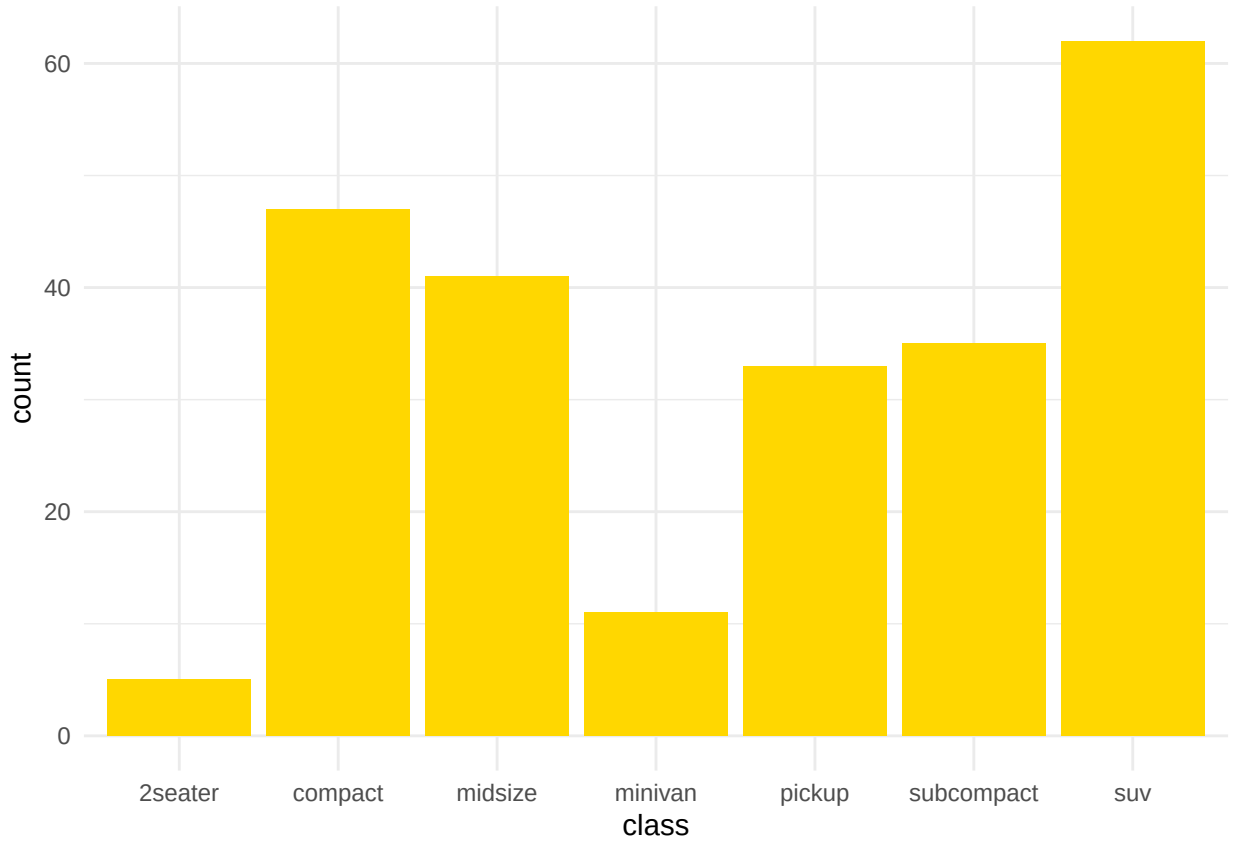
```
## `geom_smooth()` using formula = 'y ~ x'
```



2. One Discrete, One Continuous

The number of cars in each class

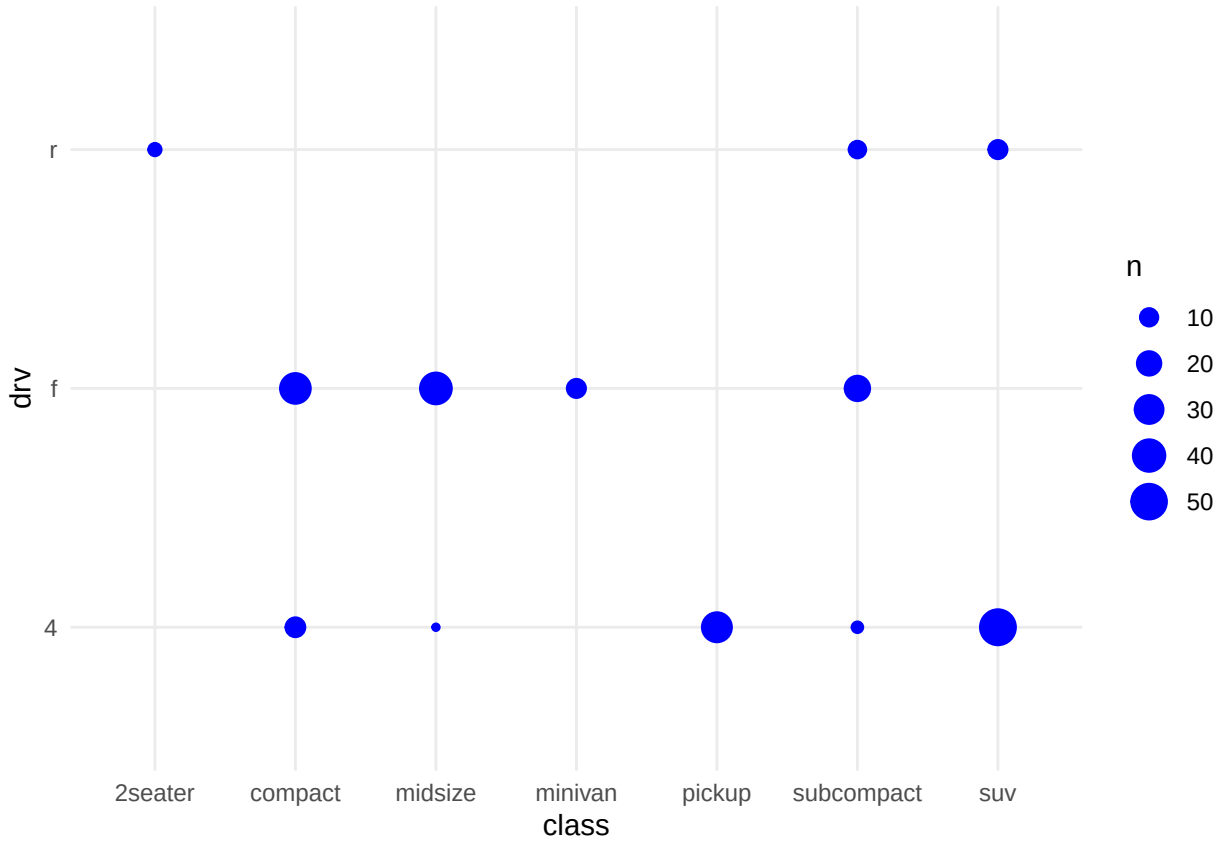
```
ggplot(mpg, aes(class)) +
  geom_bar(fill = "gold") +
  theme_minimal()
```



3. Both Discrete

The number of cars in each class and the type of drive train

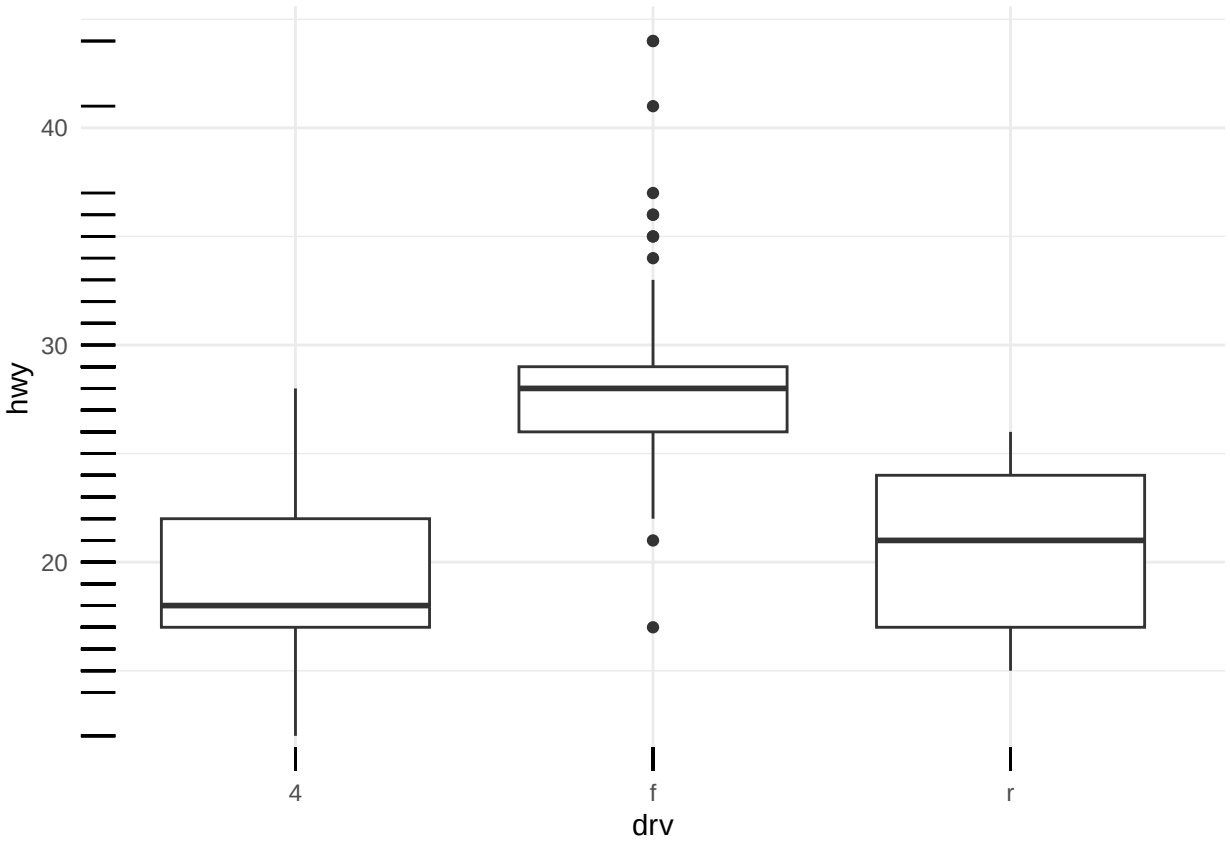
```
ggplot(mpg, aes(class, drv)) +
  geom_count(color = "blue") +
  theme_minimal()
```



4. One Discrete, One Continuous

The usage of fuel in each type of drive train

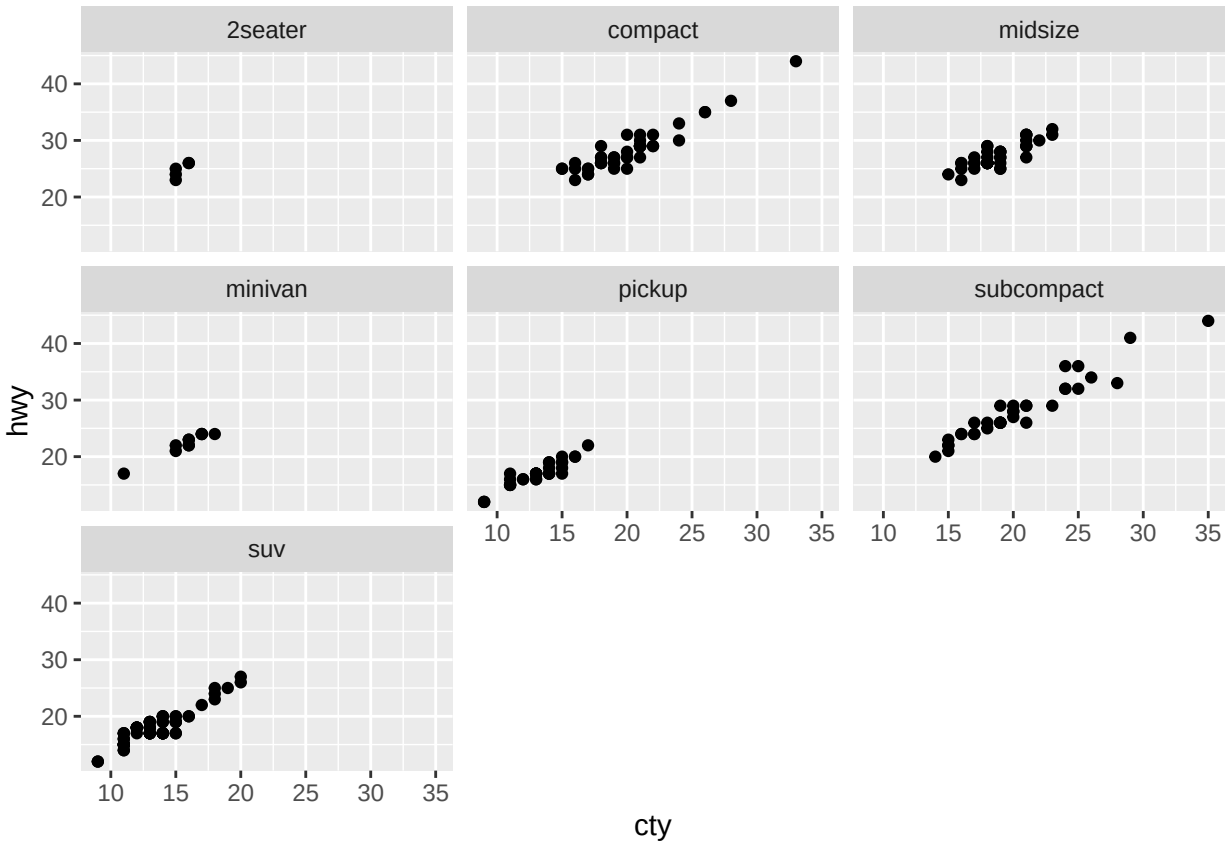
```
ggplot(mpg, aes(drv, hwy)) +
  geom_boxplot() +
  geom_rug() +
  theme_minimal()
```



5. facet

The relationship between hwy and cty in each class

```
ggplot(mpg, aes(cty, hwy)) +
geom_point() +
facet_wrap(~class)
```


2seater
compact
midsize
minivan
pickup
subcompact
suv
hwy
cty
40
30
20
10
15
20
25
30
35