Week6.rmd

Peyton Hall

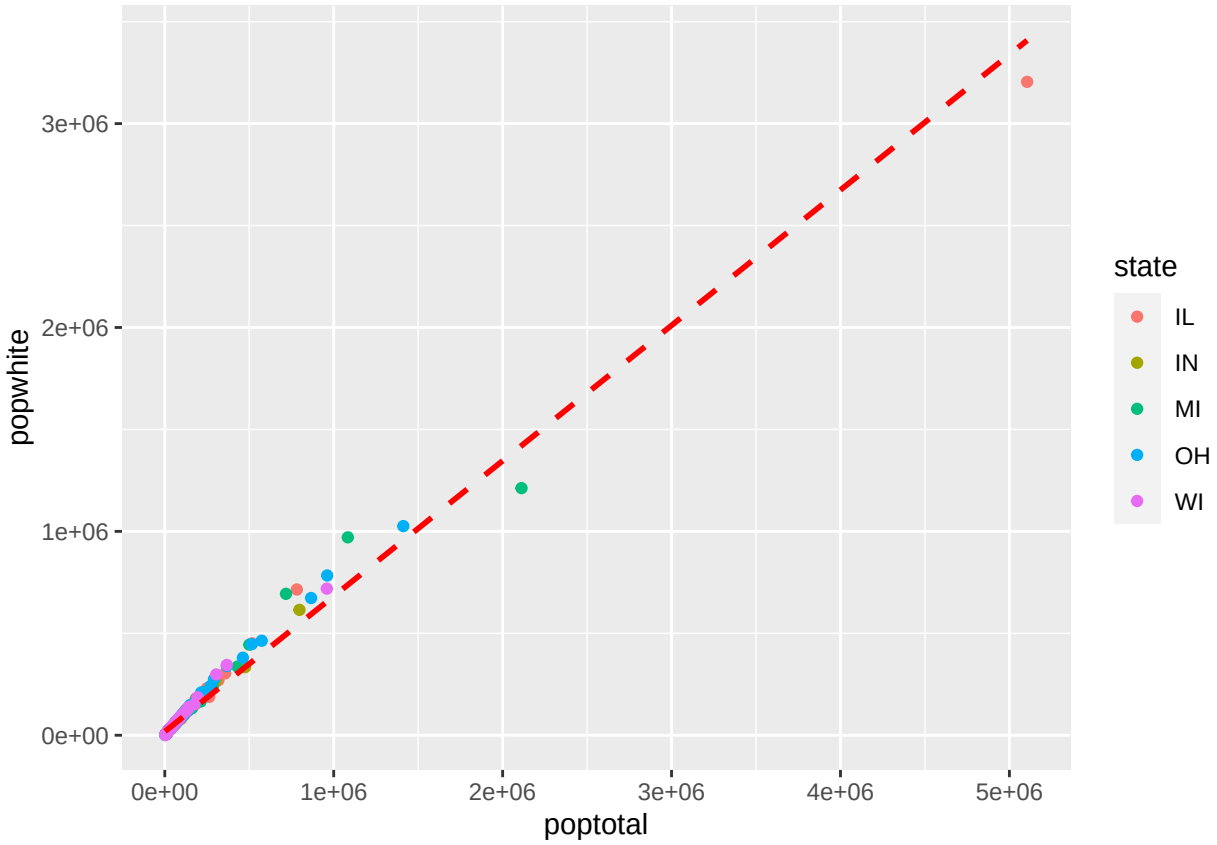
02/15/2024

```
library(ggplot2)
```

Adding a regression line to the scatter plot

```
ggplot(data = midwest, aes(x=poptotal, y=popwhite))+geom_point(aes(color=state))+geom_smooth(method = "
```

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



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```

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```

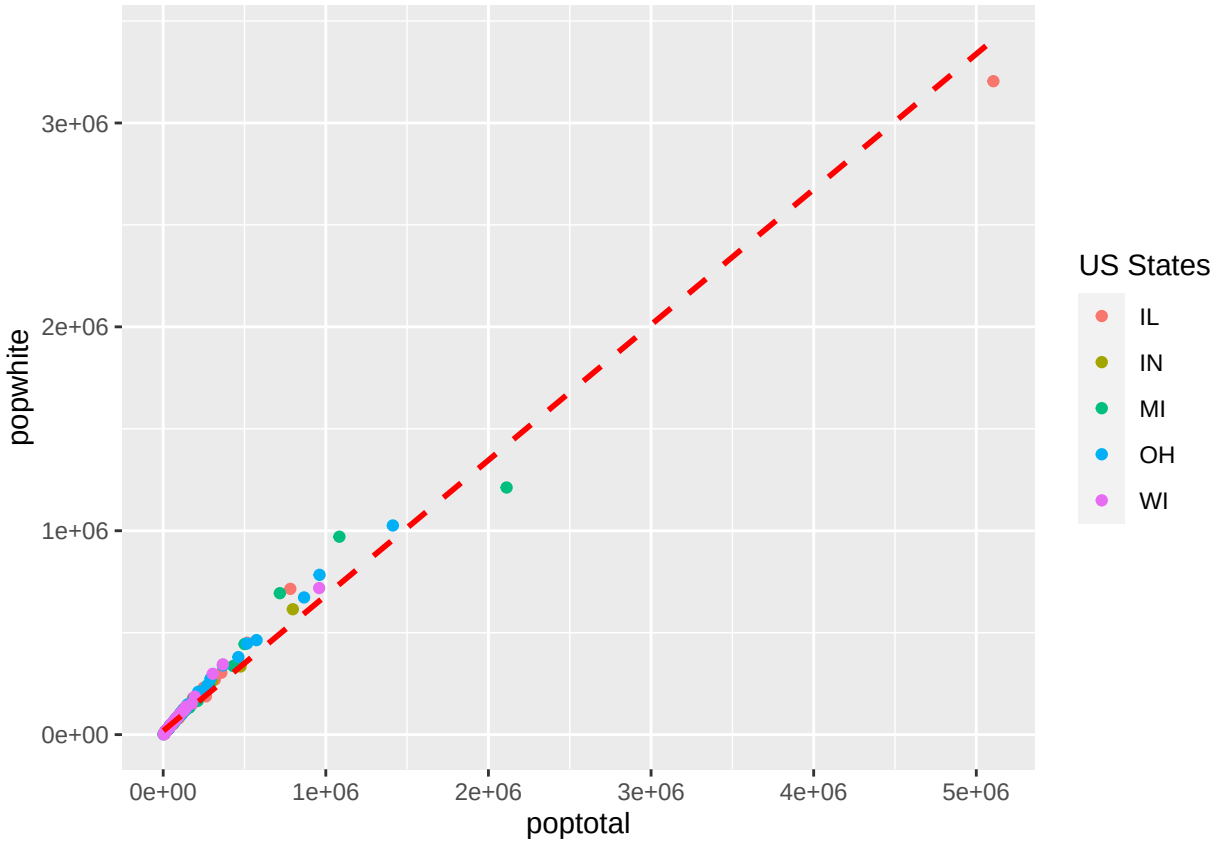


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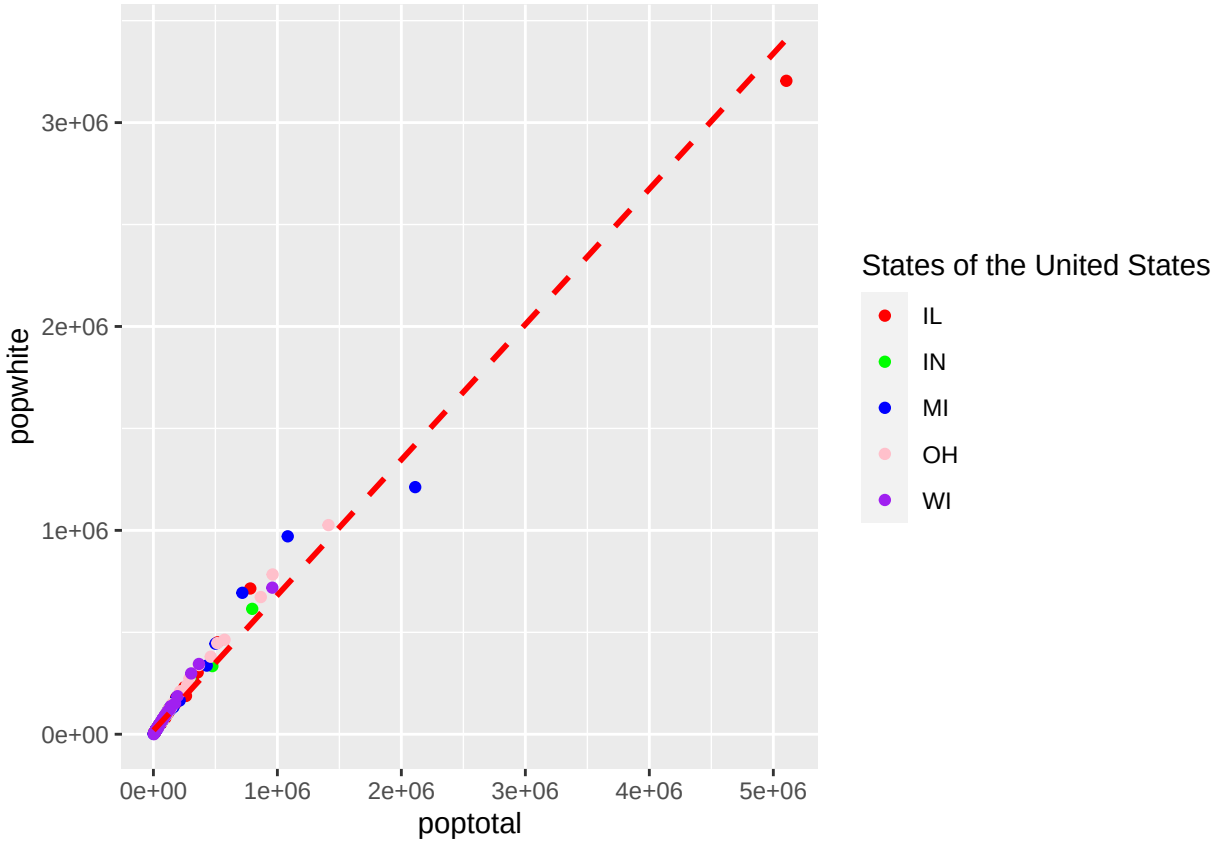
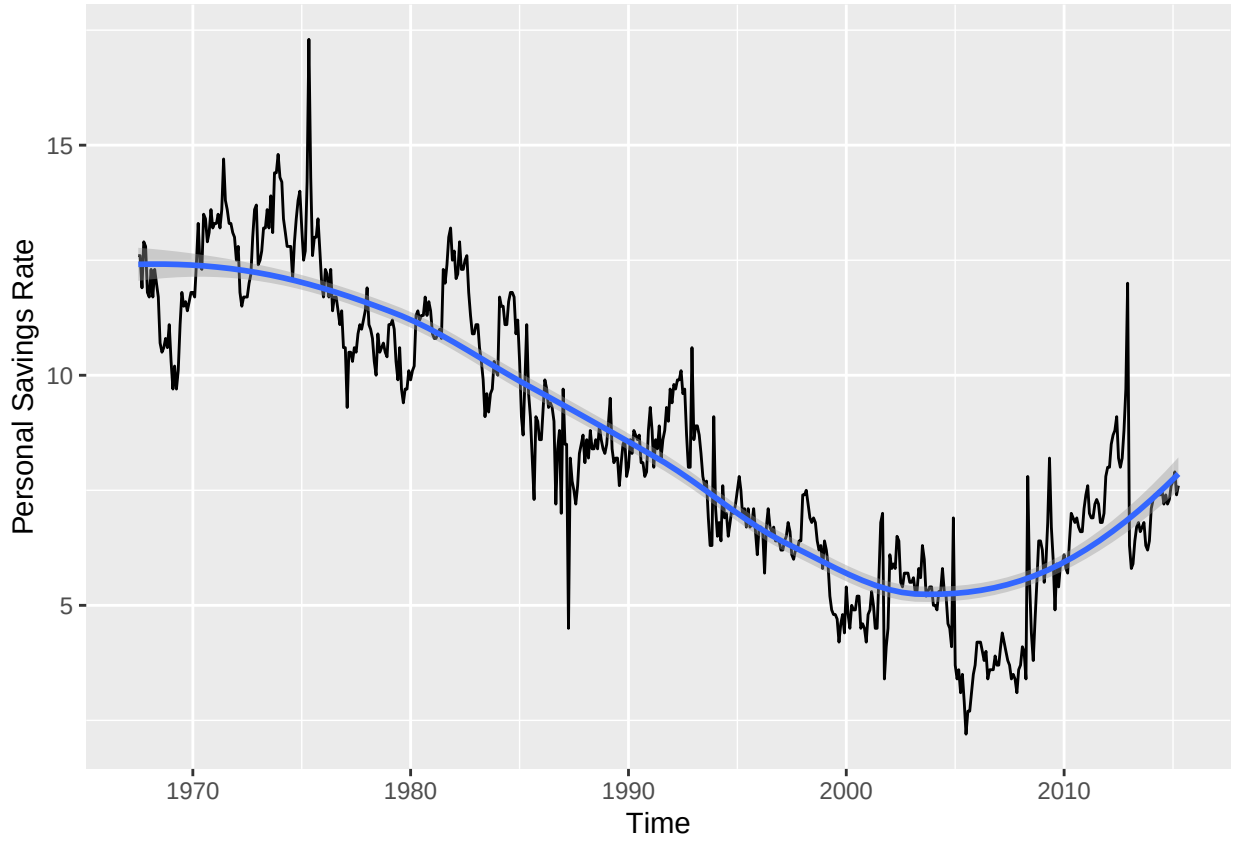



```
library(ggplot2)

#str(economics)
#View(economics)
ggplot(data=economics, aes(x=date, y=psavert))+geom_line(linetype="solid")+labs(x="Time", y="Personal Sa
```

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




```
# Load necessary libraries
library(readxl)
library(ggplot2)

# Read the Excel file
# "file" -> "Import Dataset" -> "From Excel" -> "Browse" -> Copy & Paste path:
milk <- read_excel("Desktop/Data211/Week 6/milk.xlsx")
str(milk)


# create variable year and add it into milk data set
milk$year <- format(milk$timep, format = "%Y")
# create variable month and add it into milk data set
milk$month <- format(milk$timep, format = "%m")
ggplot(data = milk, aes(x = month, y = milk_per_cow_kg))+geom_line(aes(group=year,color=year))

year<-as.factor(milk$year)
ggplot(data = milk, aes(x = month, y = milk_per_cow_kg))+geom_line(aes(group=year,color=year))+scale_x_
```

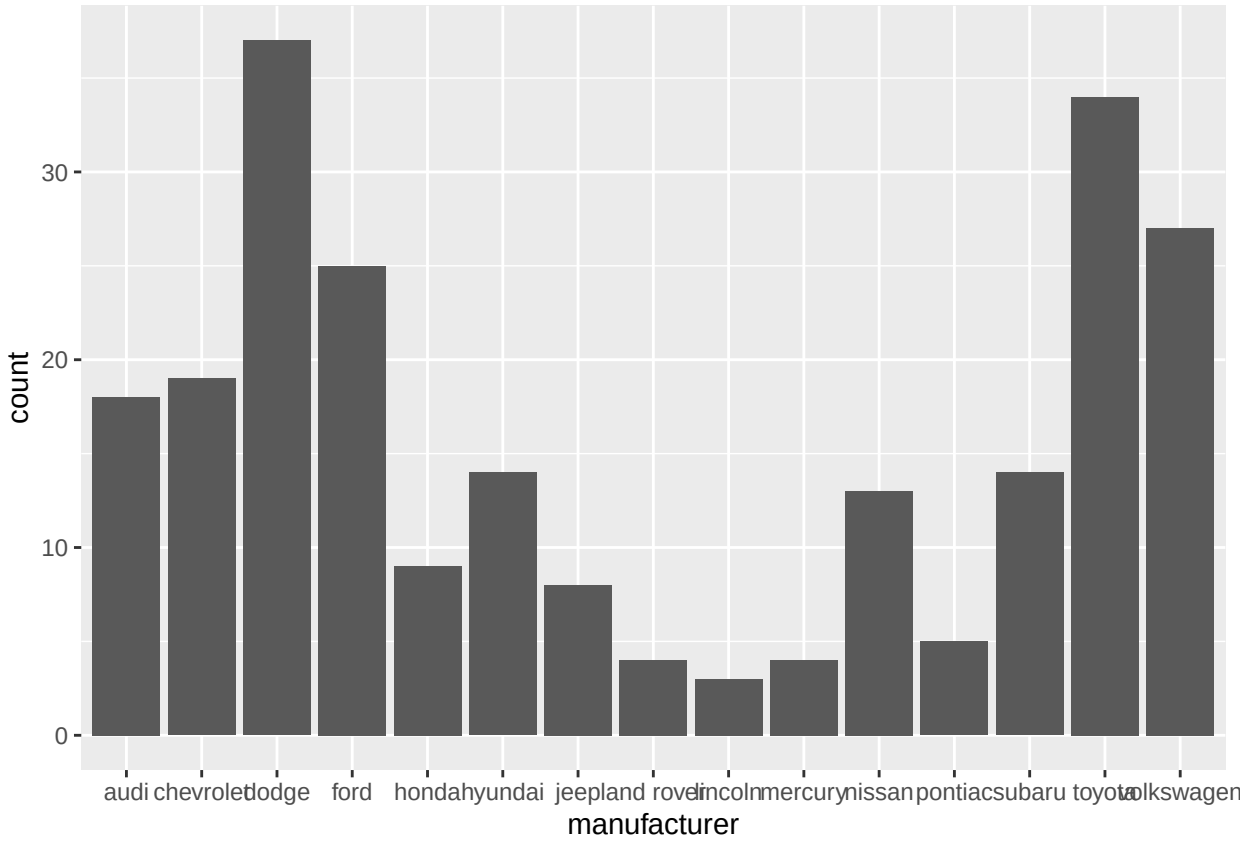
```
library(ggplot2)

str(mpg)
```

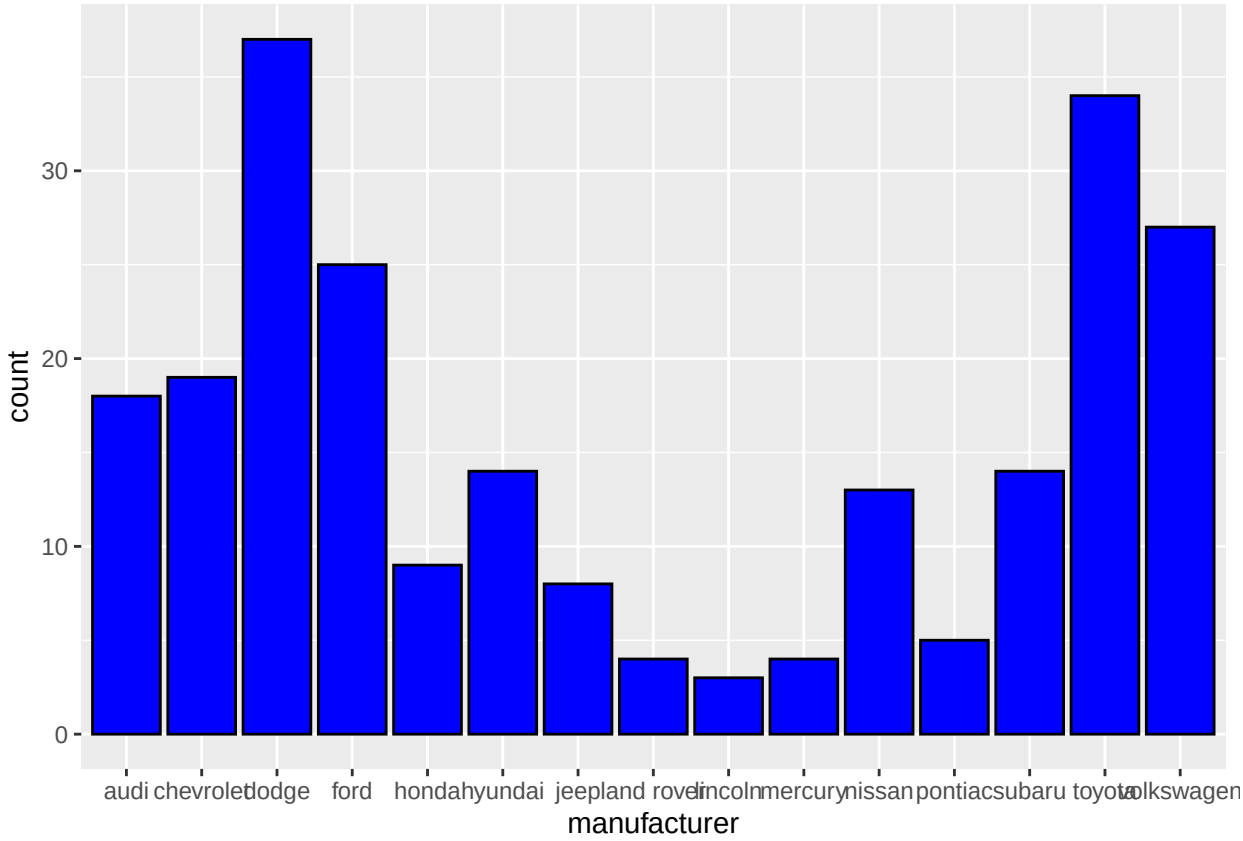
```
## tibble [234 x 11] (S3: tbl_df/tbl/data.frame)
##  $ manufacturer: chr [1:234] "audi" "audi" "audi" "audi" ...
```

```
##  $ model       : chr [1:234] "a4" "a4" "a4" "a4" ...
##  $ displ       : num [1:234] 1.8 1.8 2 2 2.8 2.8 3.1 1.8 1.8 2 ...
##  $ year        : int [1:234] 1999 1999 2008 2008 1999 1999 2008 1999 1999 2008 ...
##  $ cyl         : int [1:234] 4 4 4 4 6 6 6 4 4 4 ...
##  $ trans       : chr [1:234] "auto(l5)" "manual(m5)" "manual(m6)" "auto(av)" ...
##  $ drv         : chr [1:234] "f" "f" "f" "f" ...
##  $ cty         : int [1:234] 18 21 20 21 16 18 18 18 16 20 ...
##  $ hwy         : int [1:234] 29 29 31 30 26 26 27 26 25 28 ...
##  $ fl          : chr [1:234] "p" "p" "p" "p" ...
##  $ class       : chr [1:234] "compact" "compact" "compact" "compact" ...
```

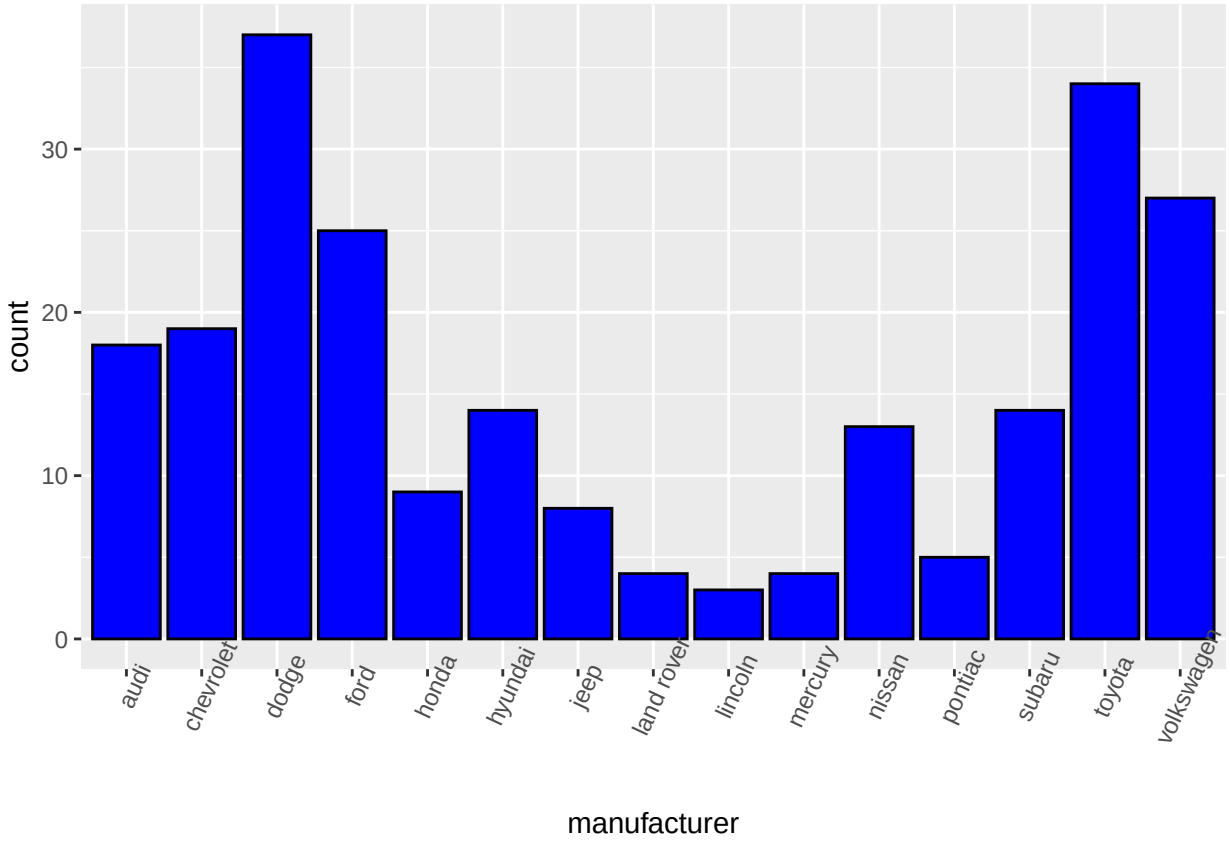
```
ggplot(data=mpg,aes(x=manufacturer))+geom_bar()
```



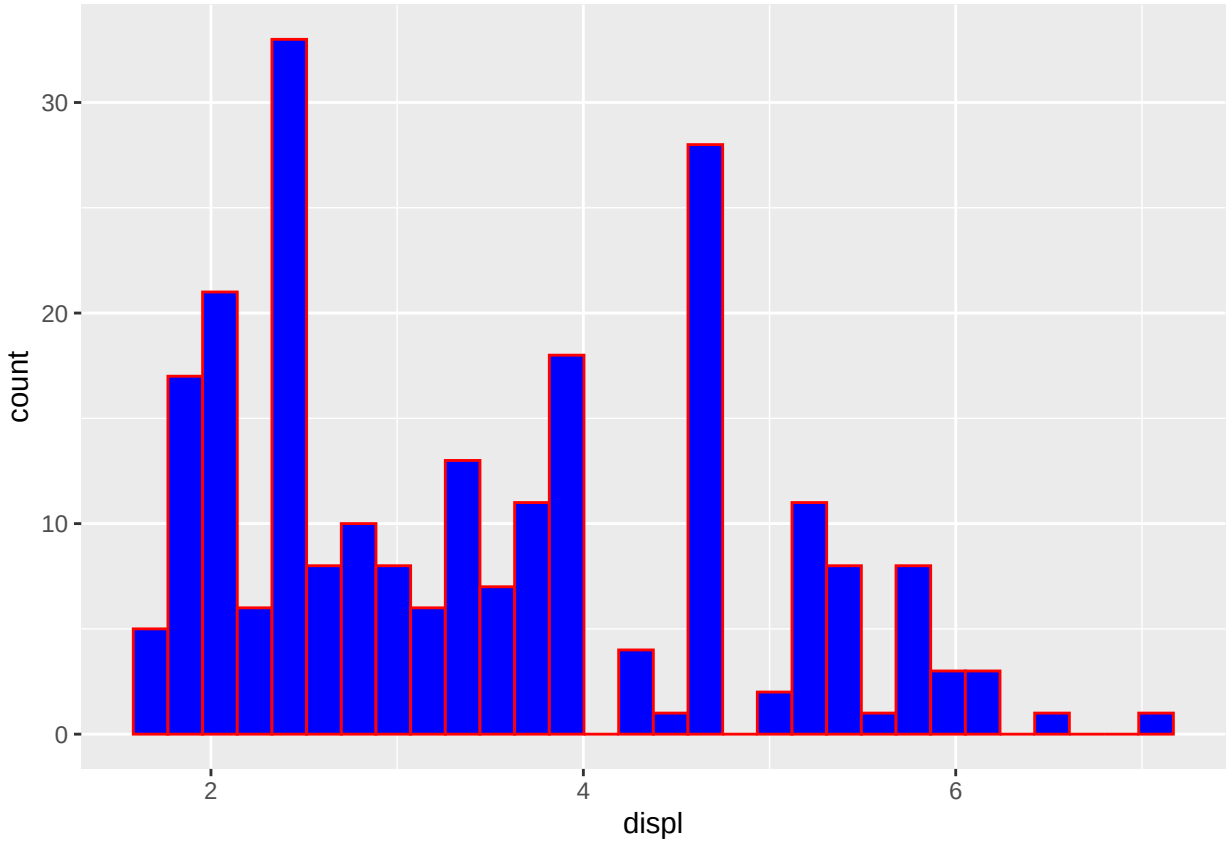

```
ggplot(data=mpg,aes(x=manufacturer))+geom_bar(fill="blue",color="black")
```



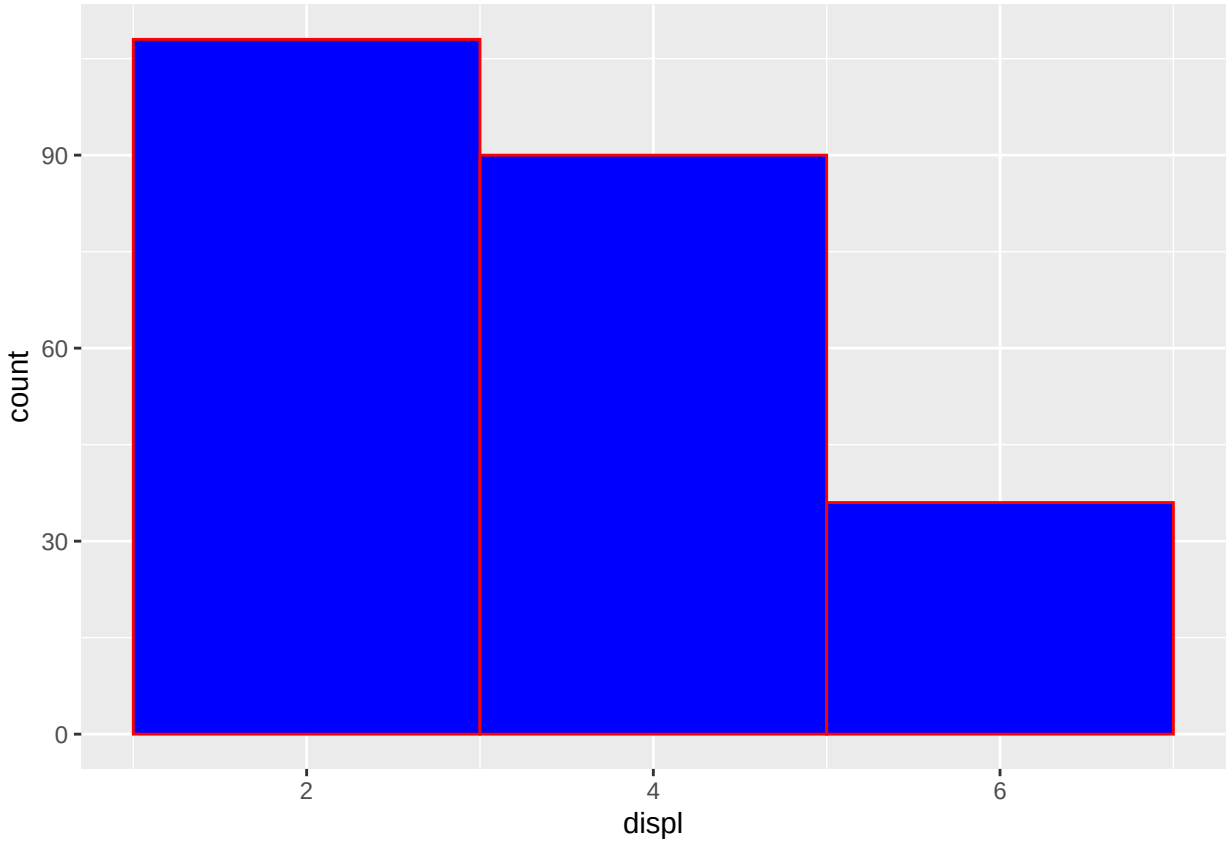

```
ggplot(data=mpg,aes(x=manufacturer))+geom_bar(fill="blue",color="black")+theme(axis.text.x = element_te
```



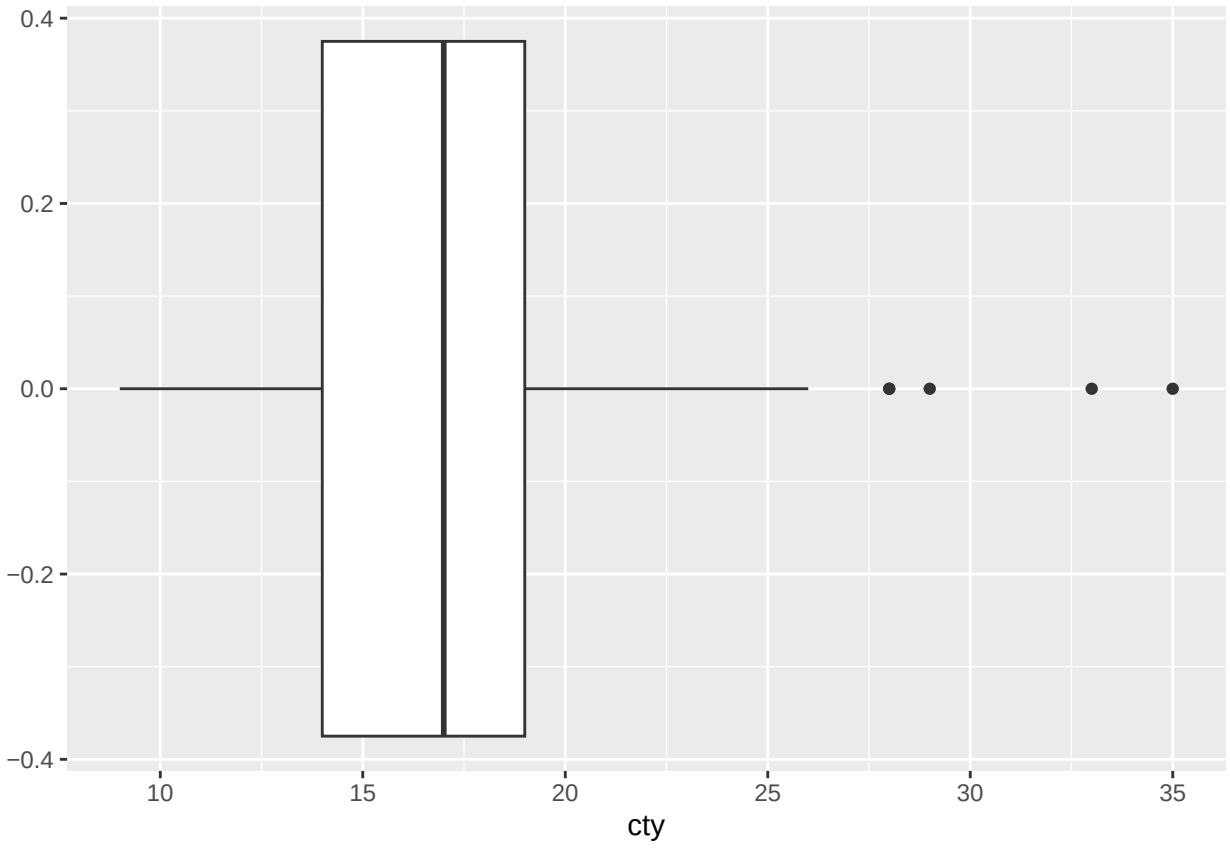

```
ggplot(data=mpg,aes(x=displ))+geom_histogram(bins=30, fill="blue",color="red")
```



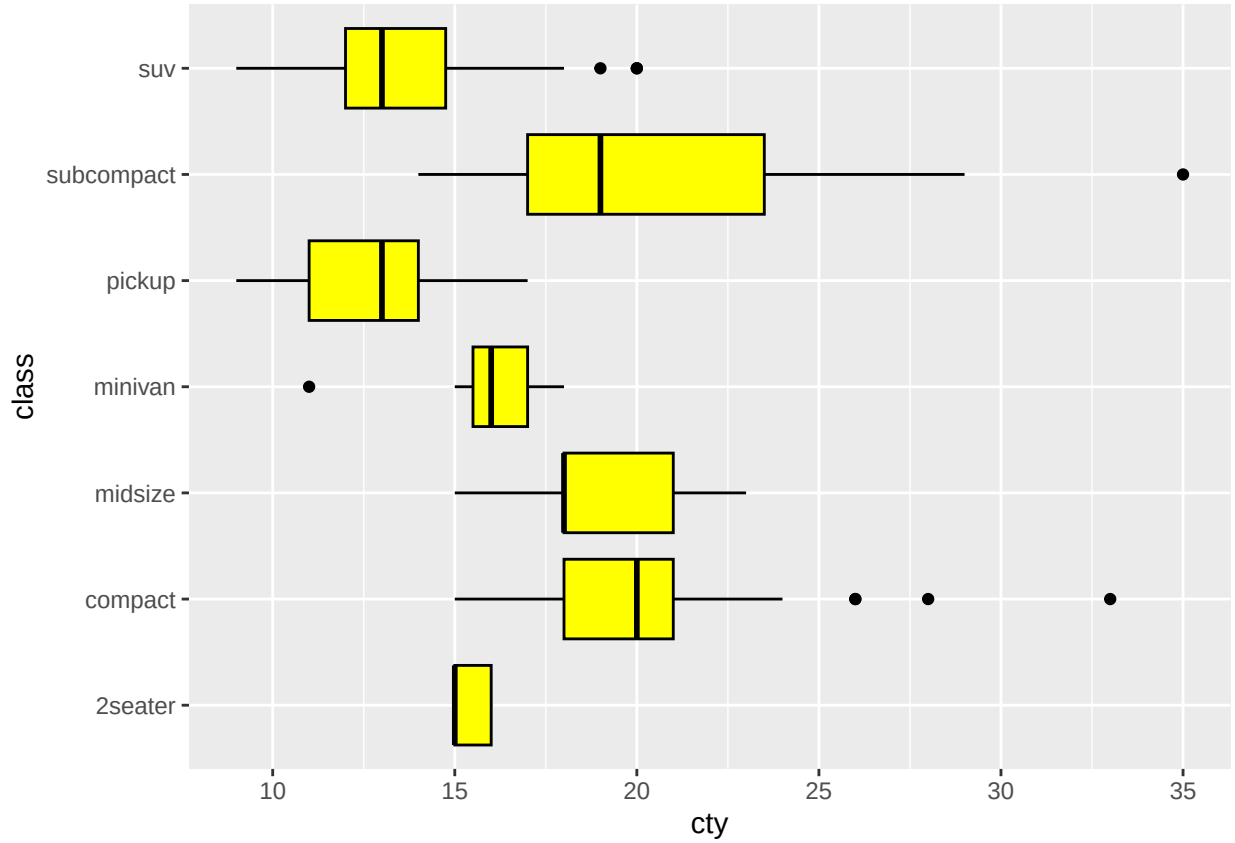

```
ggplot(data=mpg,aes(x=displ))+geom_histogram(binwidth=2, fill="blue",color="red")
```




```
ggplot(data=mpg, aes(cty))+geom_boxplot()
```




```
#View(mpg)
ggplot(data=mpg, aes(x=cty, y=class))+geom_boxplot(fill="yellow",color="black")
```


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