lab0

Aubrey Condor

9/1/2020

Loading the data

```
data("USArrests")
library(readr)
stateCoord <- read_table2("stateCoord.txt")
```

```
## Parsed with column specification:
## cols(
##   state = col_character(),
##   long = col_double(),
##   lad = col_double()
## )
```

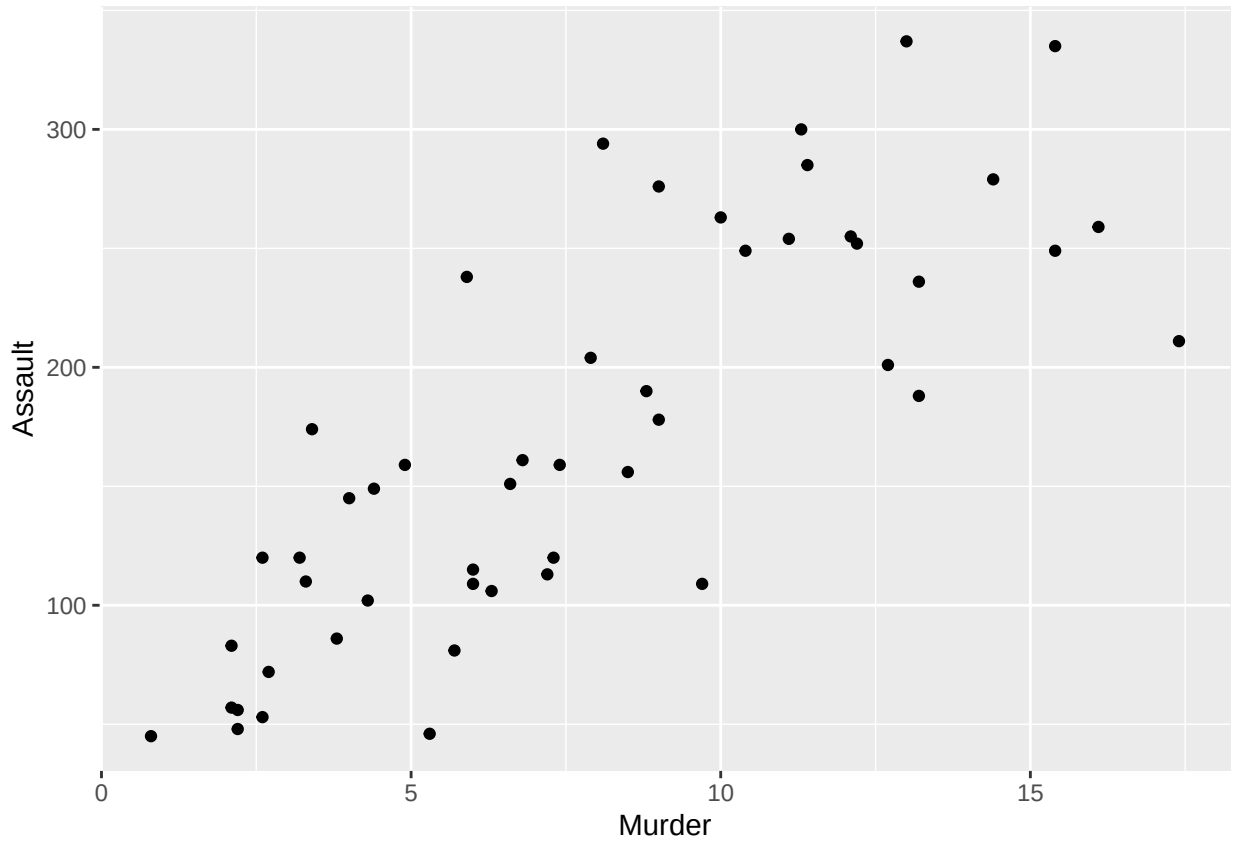
```
library(tidyverse)
```

```
## -- Attaching packages ------------ tidyverse 1.3.0 --

## v ggplot2 3.3.2     v dplyr   1.0.2
## v tibble  3.0.0     v stringr 1.4.0
## v tidyr   1.1.1     v forcats 0.5.0
## v purrr   0.3.4

## -- Conflicts --------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

Visualizing the data

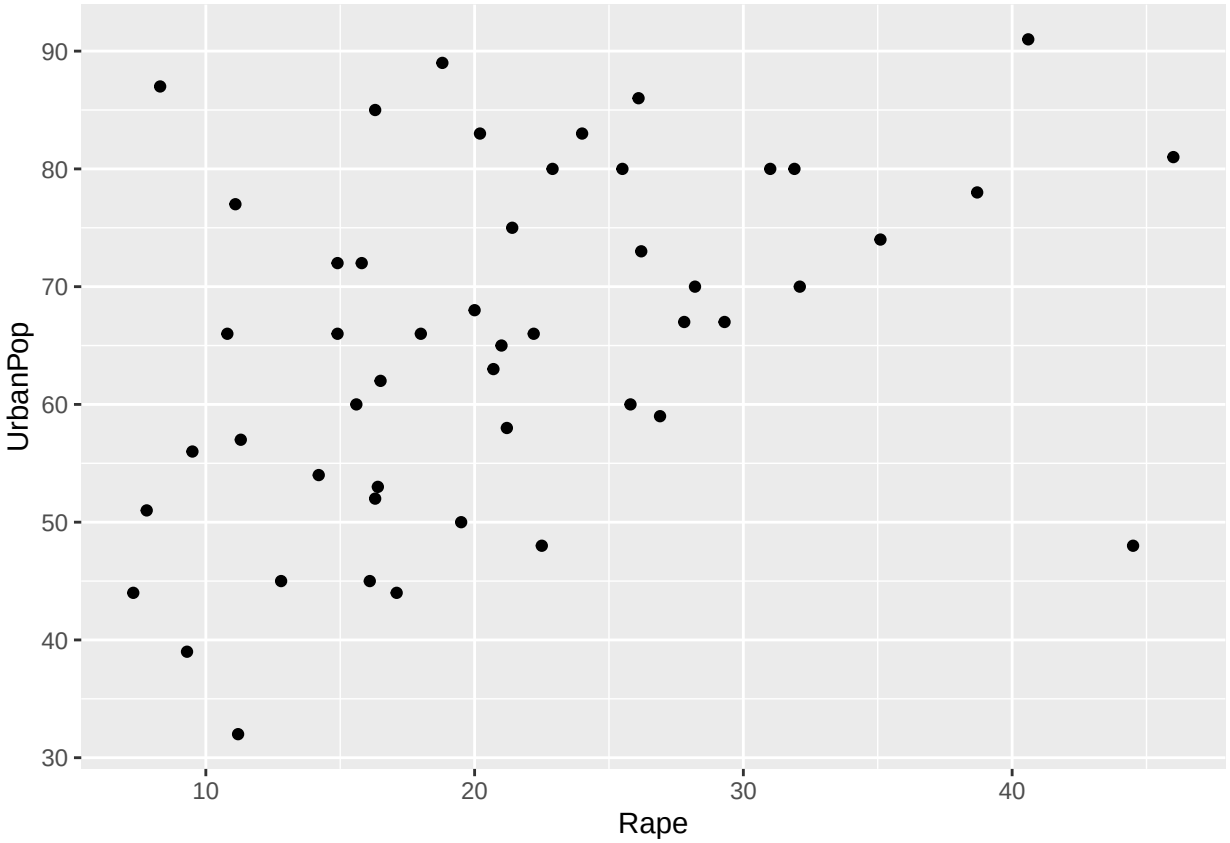
plotting Murder v Assault

```
library(ggplot2)
ggplot(USArrests, aes(x=Murder, y=Assault)) +
  geom_point()
```



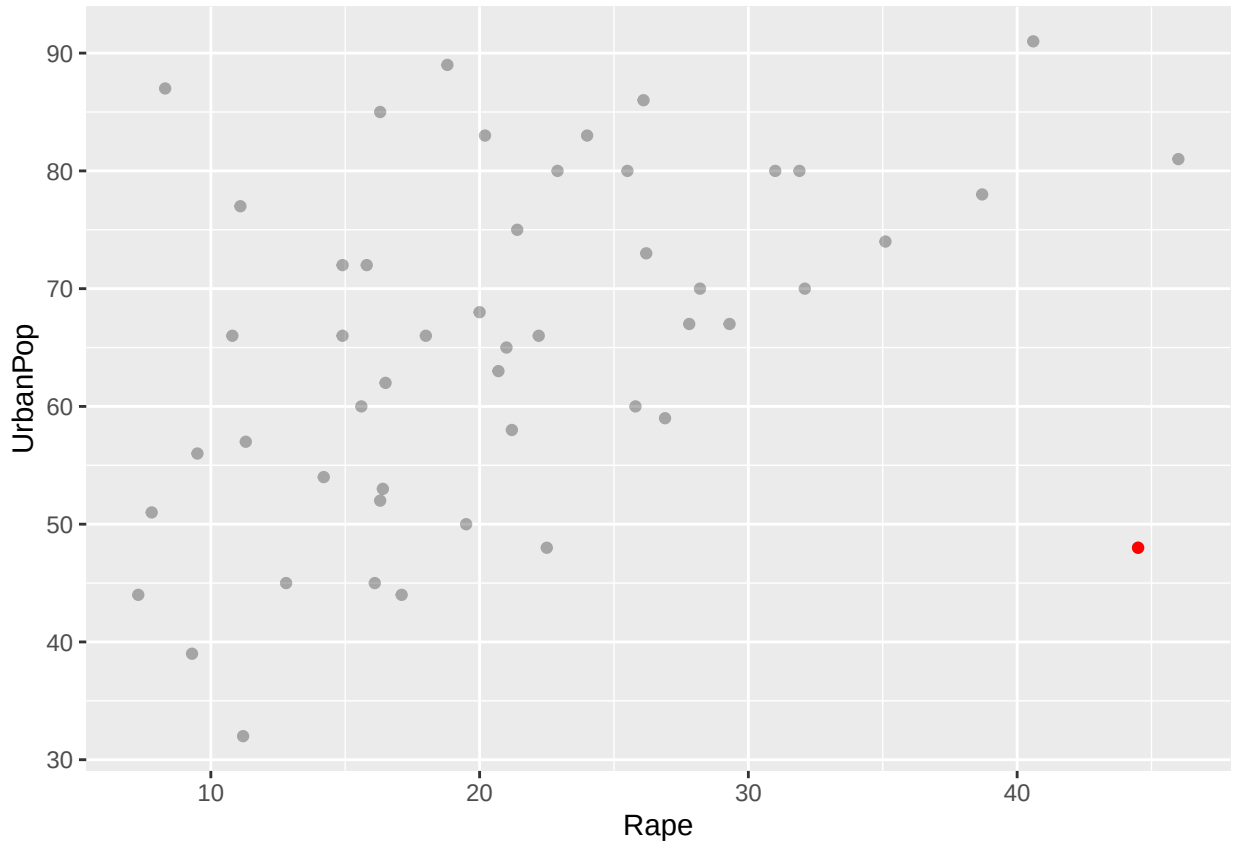
plotting Rape v urban population

```
ggplot(USArrests, aes(x=Rape, y=UrbanPop)) +
  geom_point()
```



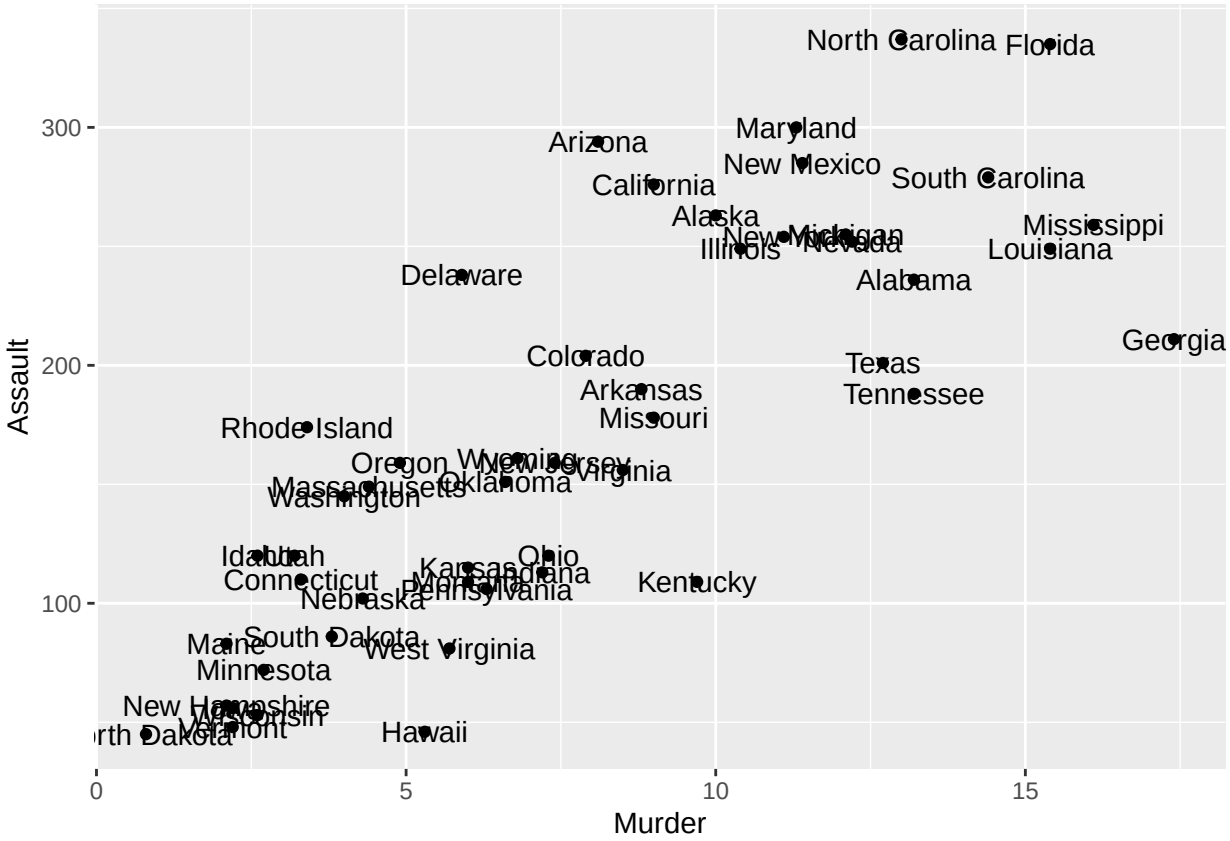
plotting Rape v urban population w/ outlier highlighted

```
USArrests_outliers <- USArrests %>%
  filter(UrbanPop < 55 & Rape > 40)

USArrests %>%
  ggplot(aes(x=Rape, y=UrbanPop)) +
  geom_point(alpha=0.3) +
  geom_point(data=USArrests_outliers, aes(x=Rape, y=UrbanPop), color='red')
```



Re-make the plots with the state names

```
ggplot(USArrests, aes(x=Murder, y=Assault)) +
  geom_point() + geom_text(aes(label=rownames(USArrests)))
```



Not continuing the lab: feel comfortable with using Rmarkdown and git.