Supplement for Lecture 10: Partitioning Variability

Load Data

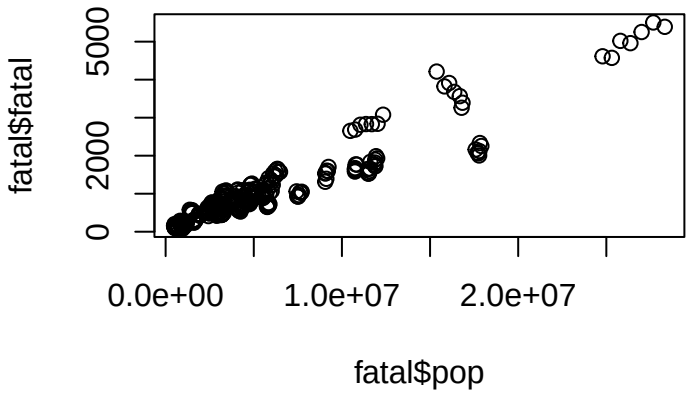
```
data("Fatalities") # Load Data

fatal = Fatalities[,c("fatal","pop","youngdrivers")]

head(fatal)
```

```
##   fatal     pop youngdrivers
## 1   839 3942002     0.211572
## 2   930 3960008     0.210768
## 3   932 3988992     0.211484
## 4   882 4021008     0.211140
## 5  1081 4049994     0.213400
## 6  1110 4082999     0.215527
```

Variables of Interest - *fatal* = Number of vehicle fatalities - *pop* = Population - *youngdrivers* = Percent of Drivers 15 - 24

Create New Variable to Adjust for Population

```
#Consider scatterplot
plot(x=fatal$pop,y=fatal$fatal)
```




```
#Create New Variable Called adj_fatal
fatal$adj_fatal = (fatal$fatal/fatal$pop)*1000
```

```
#Remove Original Variable
fatal$fatal = NULL

#Preview Modified Dataset
head(fatal)
```

```
##       pop youngdrivers adj_fatal
## 1 3942002     0.211572  0.212836
## 2 3960008     0.210768  0.234848
## 3 3988992     0.211484  0.233643
## 4 4021008     0.211140  0.219348
## 5 4049994     0.213400  0.266914
## 6 4082999     0.215527  0.271859
```

```
#Consider new scatterplot
plot(x=fatal$pop,y=fatal$adj_fatal)
```