Lab0

Amy Ko, SID: 24978168

September 1, 2017

1 Visualizing the data

Assault arrests and murder arrests seem to be positvely correlated.
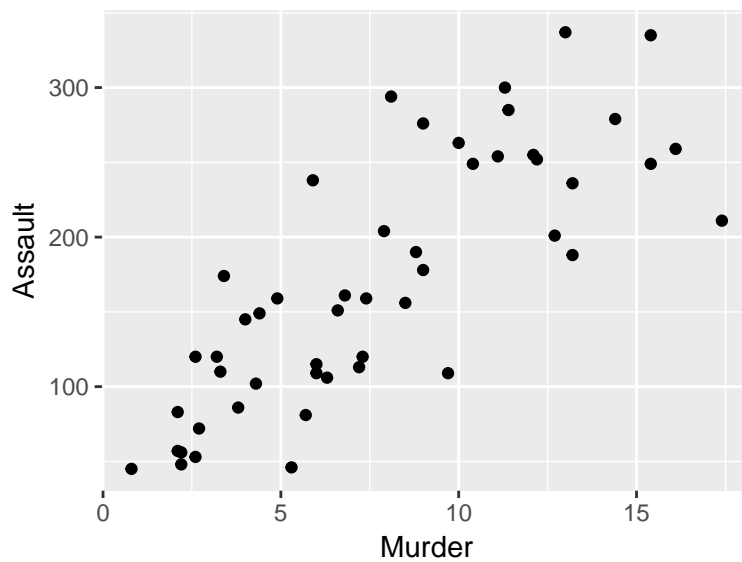

Figure 1: Murder vs. Assault

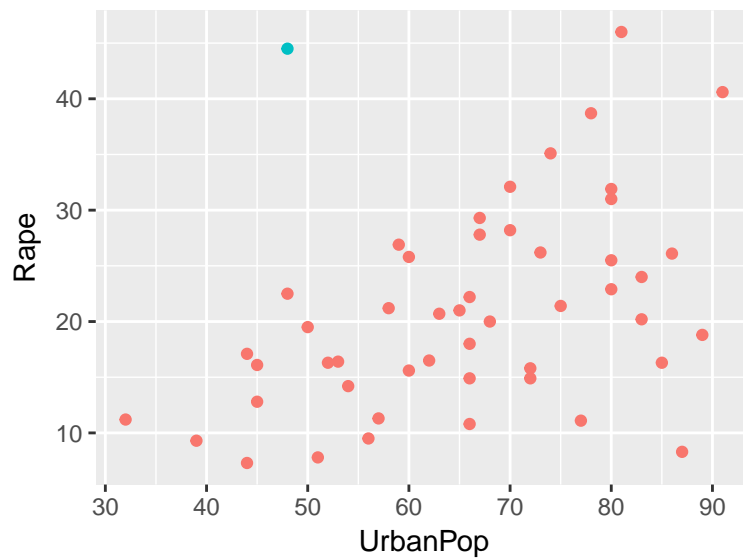This plot shows the outlier in a different color.

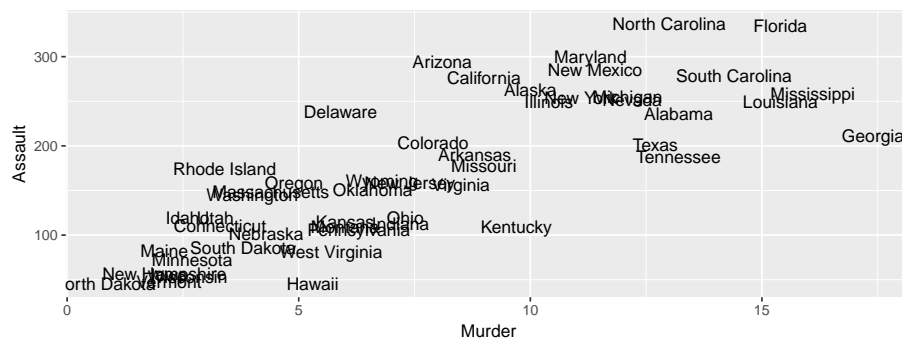Figure 2: Assault vs. Murder

Alaska is a scary place.
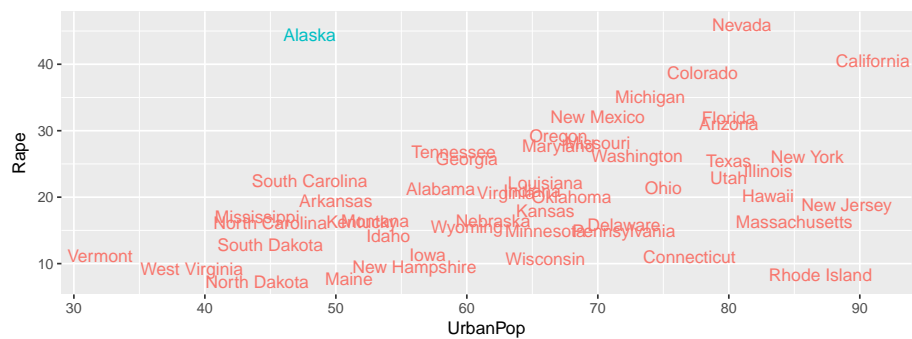

Figure 3: Rape vs. Urban population

Figure 4: Rape vs. Urban population

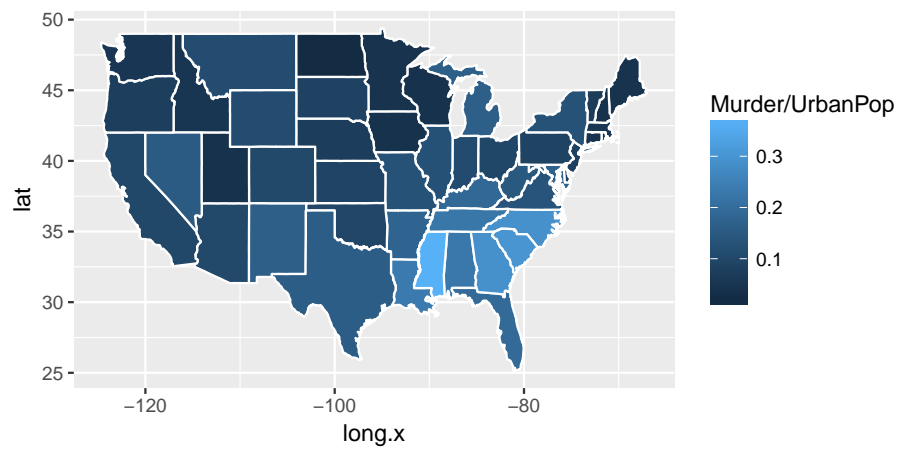Murder rate by state, minus Hawaii and Alaska.

Figure 5: Murder rate by state

2 Regression

The residuals seem slightly higher for higher predicted values. Also, there is one clear outlier.
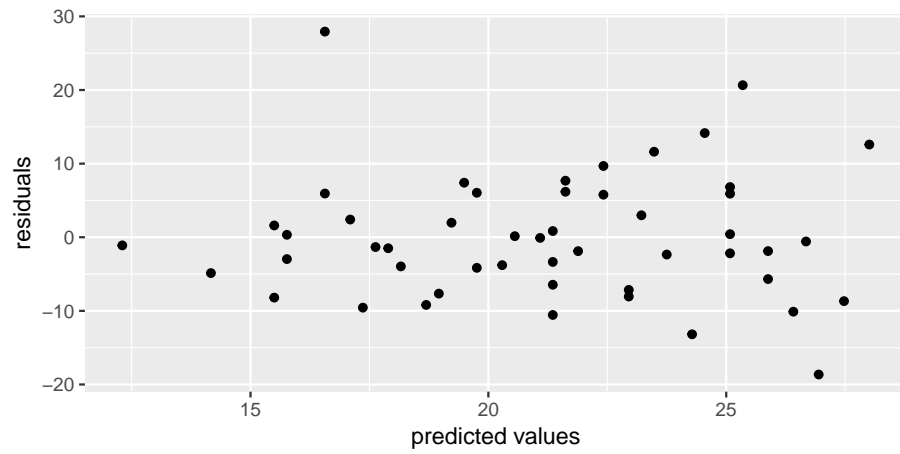
Figure 6: predicted vs. residual

Linear regression on urban population vs. rape. The blue line shows the predicted values.
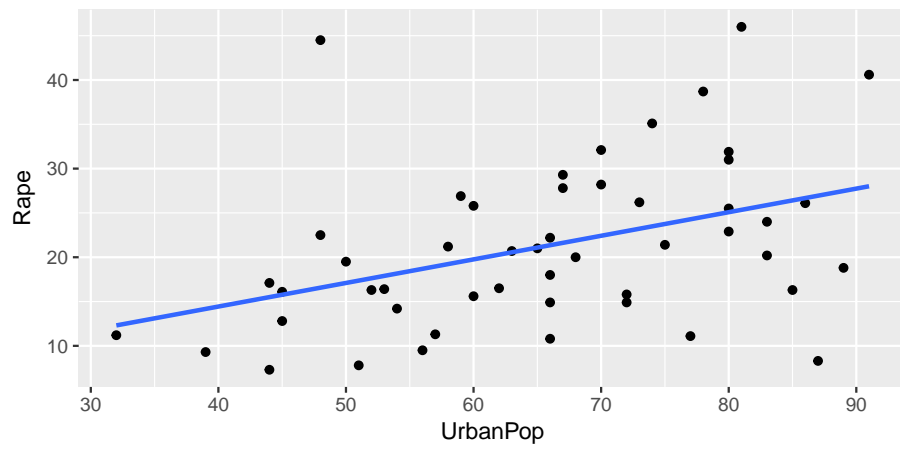

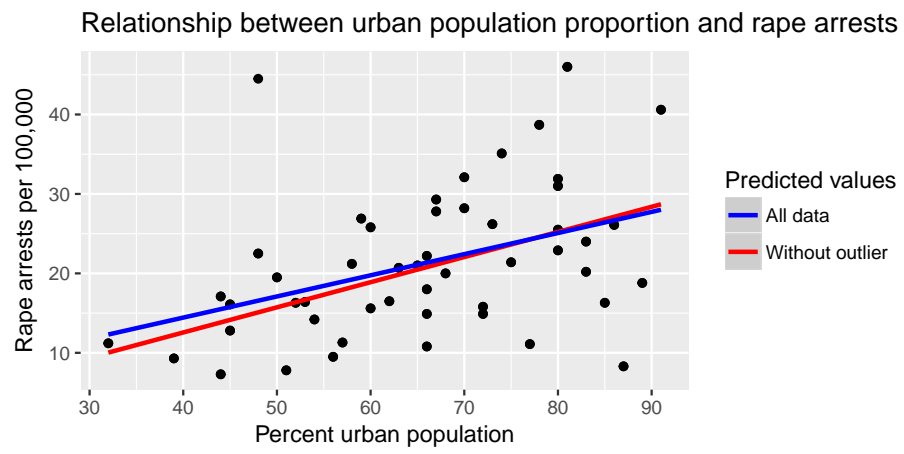Figure 7: Urban population vs. Rape

The red line shows the predicted values without the outlier.

Figure 8: Urban population vs. Rape