Lab 0

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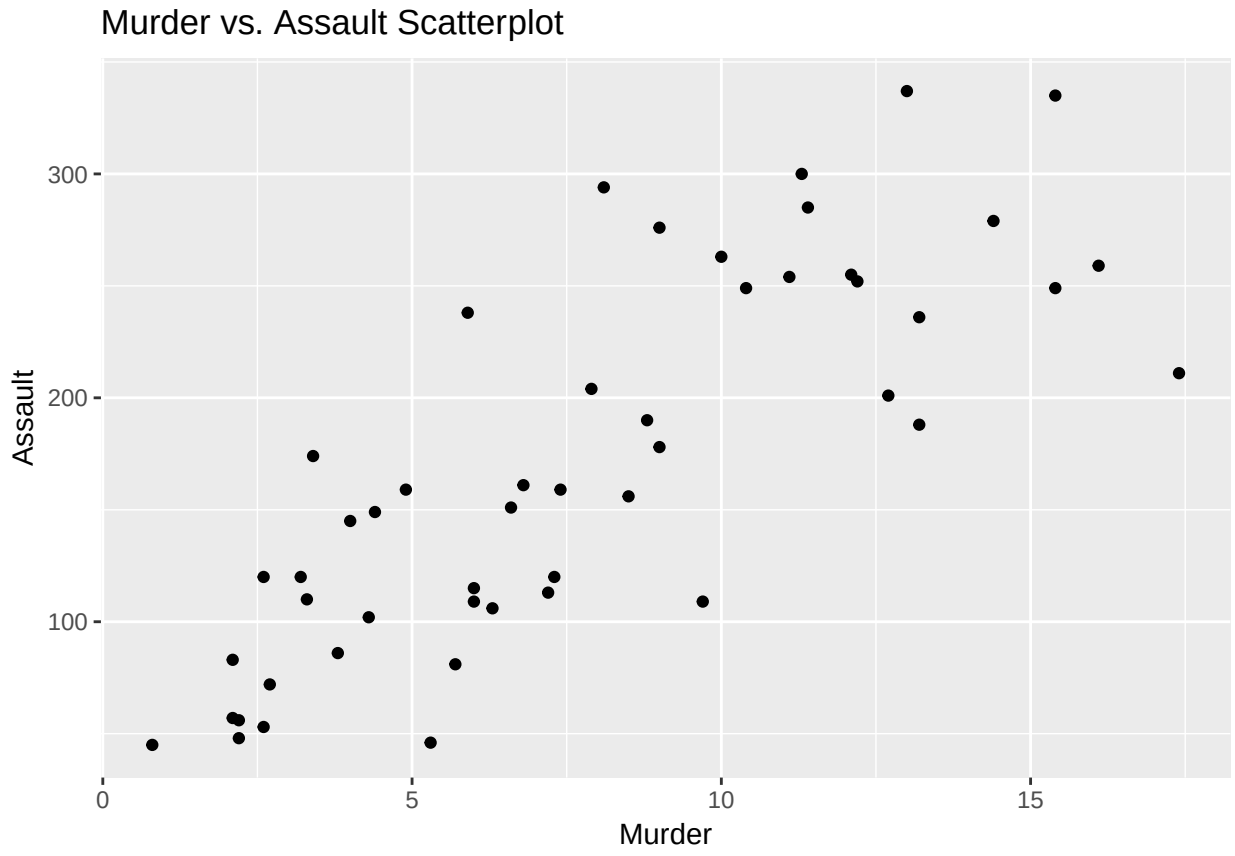
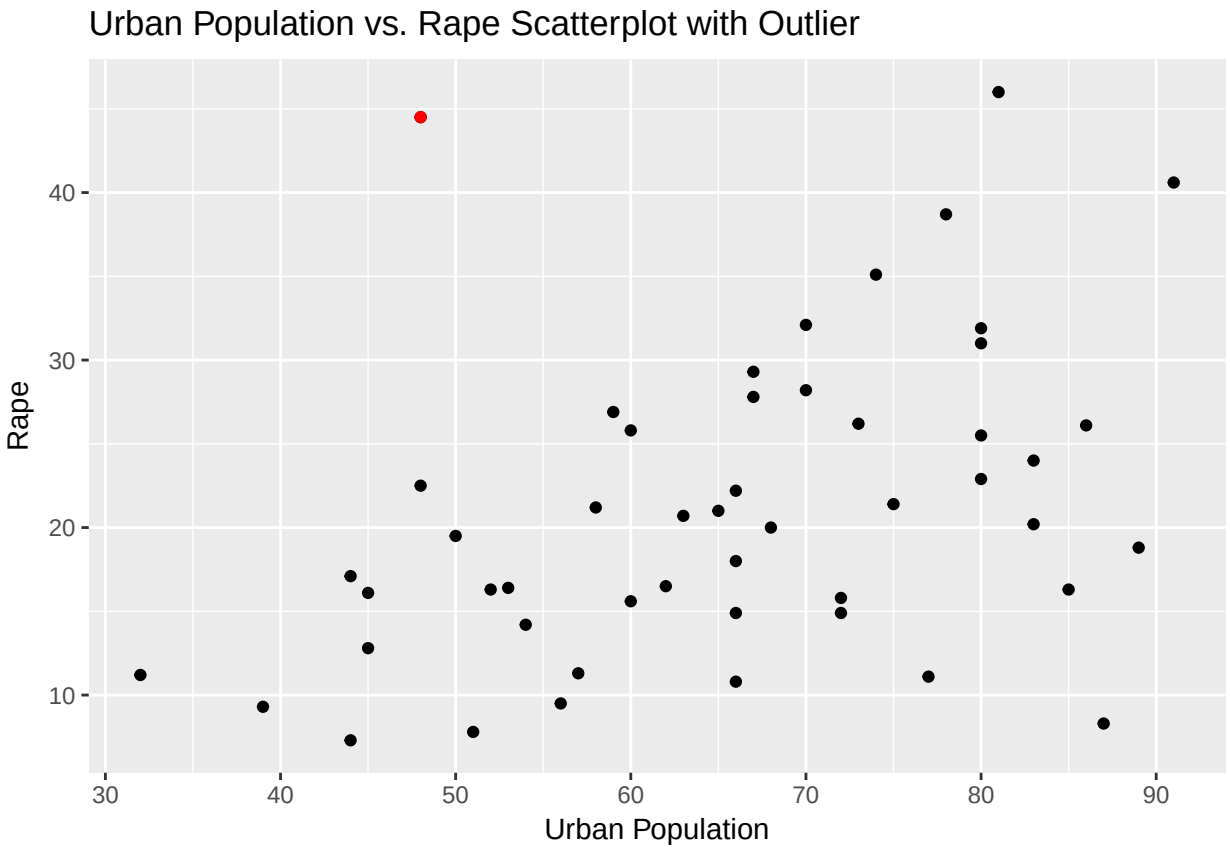
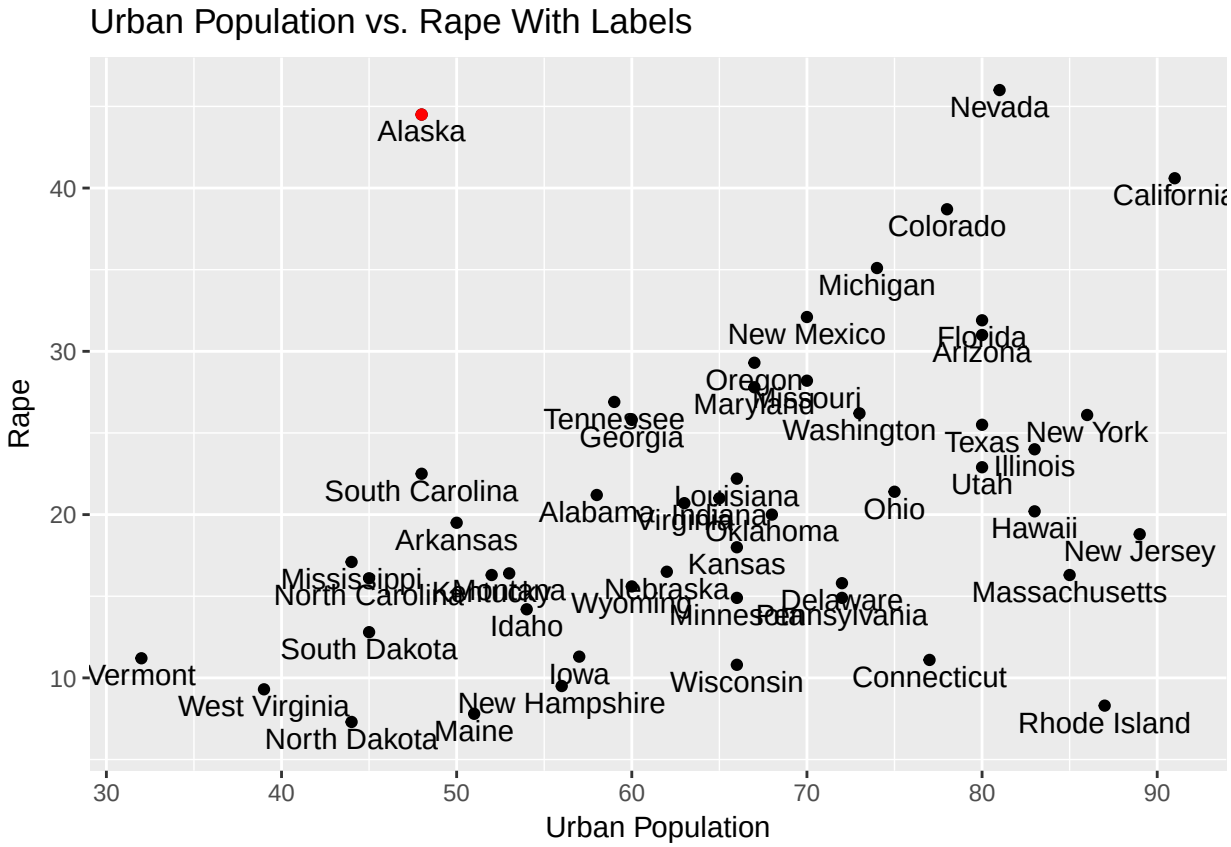



Urban Population vs. Rape Scatterplot with Outlier
Rape
40
30
20
10
30
40
50
60
70
80
90
Urban Population


Urban Population vs. Rape With Labels
Rape
Urban Population
40
30
20
10
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40
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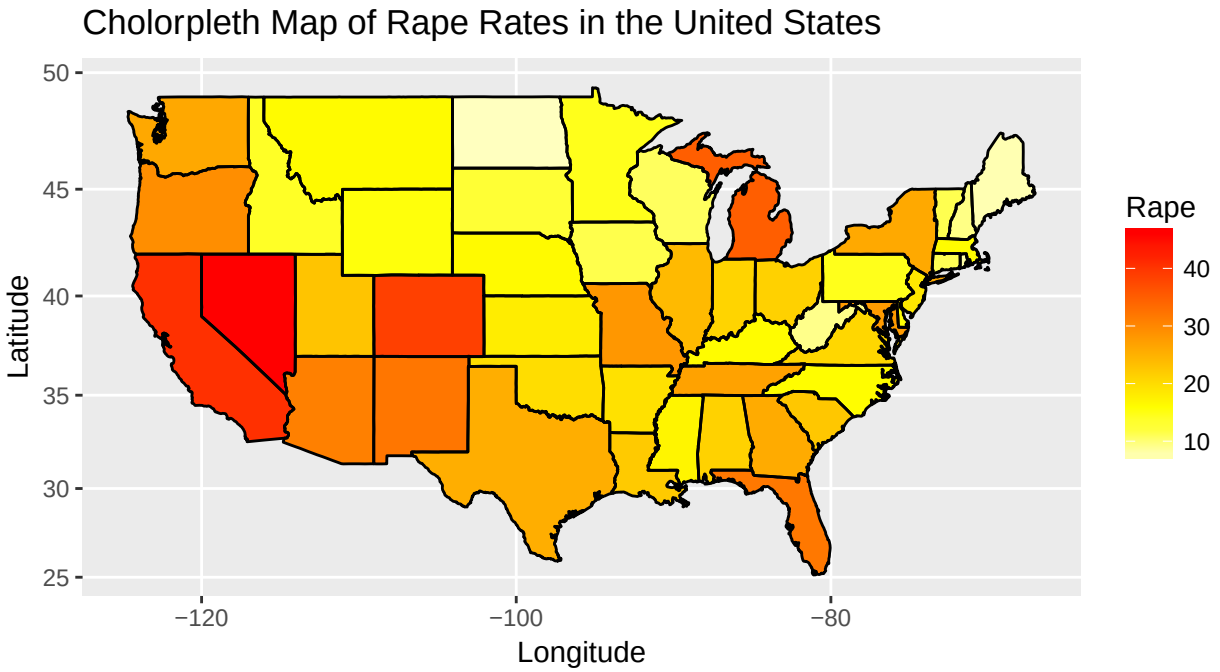
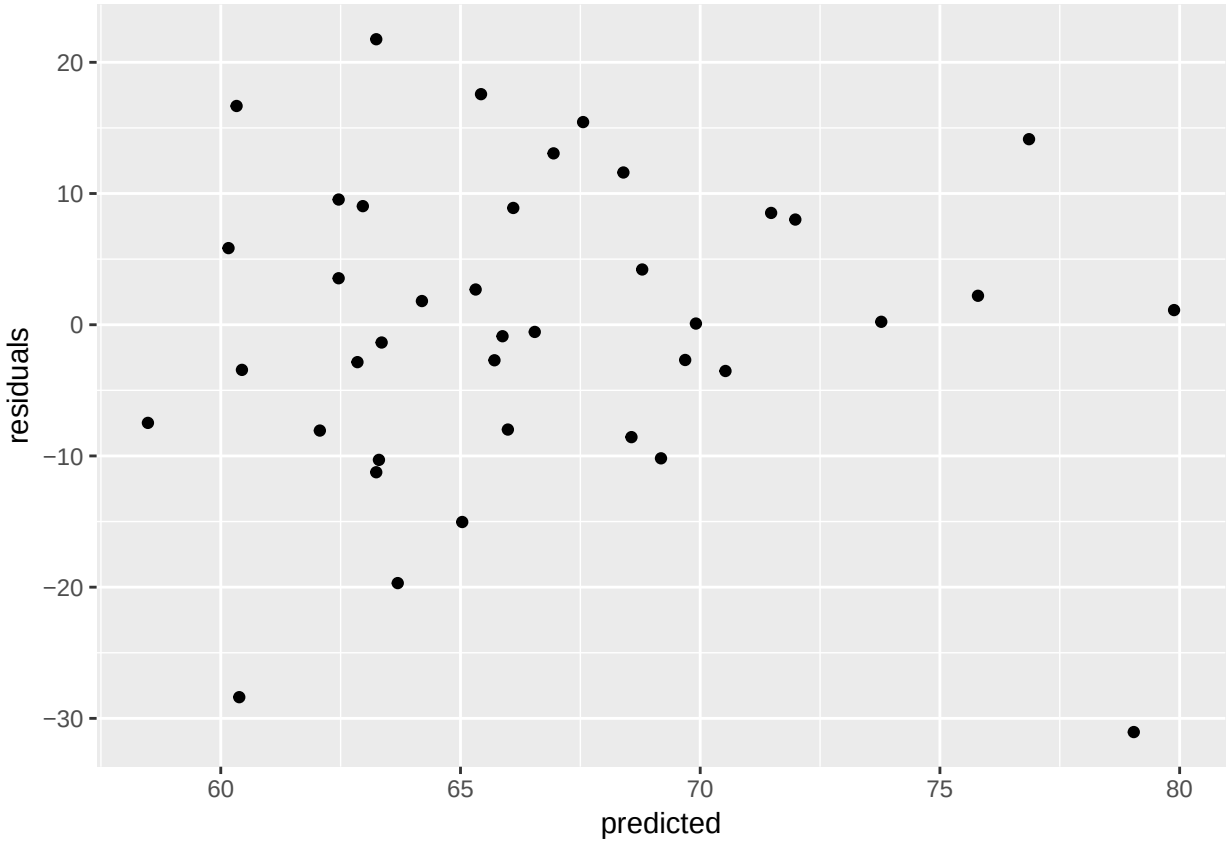
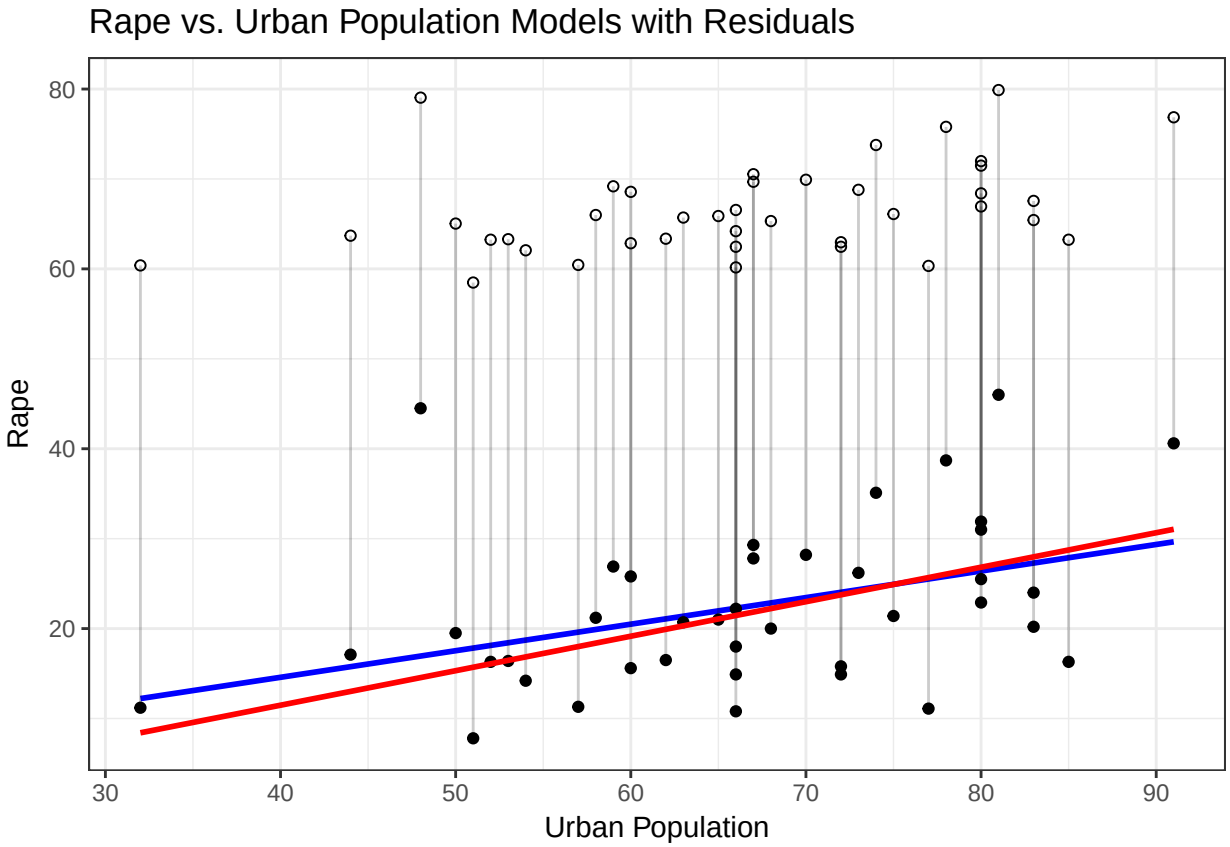
60
70
80
90
Alaska
Nevada
California
Colorado
Michigan
New Mexico
Florida
Arizona
Oregon
Maryland
Missouri
Tennessee
Georgia
Washington
Texas
New York
Illinois
Utah
South Carolina
Louisiana
Alabama
Ohio
Hawaii
Arkansas
Oklahoma
New Jersey
Kansas
Mississippi
North Carolina
Nebraska
Delaware
Massachusetts
Wyoming
Idaho
Minnesota
Pennsylvania
South Dakota
Vermont
Iowa
Wisconsin
Connecticut
West Virginia
New Hampshire
Rhode Island
North Dakota
Maine




```
##
## Call:
## lm(formula = UrbanPop ~ Rape, data = GeoUSArrests)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -31.0436  -7.6073   0.1564   8.6153  21.7571
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  54.1099     4.9514  10.928 2.74e-13 ***
## Rape          0.5603     0.2041   2.745  0.00918 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 11.81 on 38 degrees of freedom
## Multiple R-squared:  0.1655, Adjusted R-squared:  0.1436
## F-statistic: 7.538 on 1 and 38 DF,  p-value: 0.009178
```


residuals
predicted
20
10
0
−10
−20
−30
60
65
70
75
80


Rape vs. Urban Population Models with Residuals
Rape
Urban Population
80
60
40
20
30
40
50
60
70
80
90