**Data Analysis Assignment**

For this assignment you need to create a short report describing and analyzing data and interpreting the results. We will use TrovBase to create the analyses: [www.trovbase.com](http://www.trovbase.com)

For bar graphs:

* Create an appropriate header describing the variables and include your name so I know it’s your work
* Create proper x-axis and y-axis labels
* Make sure the labels are scaled properly so there is no overlap

For scatter plot with regression lines:

* Create an appropriate header describing the variables and include your name so I know it’s your work
* Create proper x-axis and y-axis labels
* Make sure the labels are scaled properly so there is no overlap
* Include the R-Squared
* Include the regression equation

For the interpretation:

* Is the relationship between the variables positive or negative?
* What is the R-Squared?
* What is the intercept and what does it mean?
* What is the coefficient and what does it mean?
* How much change in the dependent variable is created by a one unit increase in the dependent variable?
* What does this relationship mean?
* Overall, do you think the independent variable is a good predictor of the dependent variable? What do you think could be the causes of this?

Once you are finished, create a PDF document and submit it through Canvas.

Name:

1. Create a **Multivariate Frequency Bar Plot** for the following variables:
   1. Teen Birth per 100k in every state
   2. Poverty Rates in Percent in every state
   3. Violent Crime Rates in Percent in every state

Describe each of the plots briefly. Follow the rules outlined on the first page

1a)

Fill in here

1b)

Fill in here

1c)

Fill in here

1. Create a Scatter Plot using ***Violent Crime Rates in Percent*** (Y-axis) and ***Poverty Percent*** (X-axis)
2. Show your work. Follow the rules outlined on the first page.
3. Interpret the results. Follow the rules outlined on the first page.
4. Create a Scatter Plot using ***Teen Births per 100k (Y-axis)*** and ***Poverty Rates in Percent in every state*** (X-axis)
   1. Show your work. Follow the rules outlined on the first page.
   2. Interpret the results. Follow the rules outlined on the first page.