Assignment 01

This homework will help you to practice and self assess your knowledge and ability around the course concepts. Use the answer key to assess your work.

1. Assign a numeric vector with the values $\{1, 4, 12, 7, 2\}$ to an object name `scores`.
2. Assign a character vector with the values $\{CE, Outcomes, Beacon, Engage, Insight\}$ to an object name `product`.
3. Load the **tidyverse** package.
4. Make a 2 column, 4 row, data frame (`data_frame` function) with a column for `quarter` and `revenue`. Use the values $\{1, 2, 3, 4\}$ for `quarter` and $\{16000, 22000, 26000, 17000\}$ for `revenue`. Assign the data table to an object named `qrev`.
5. Install and load the **car** package.
6. Use the `?` to view the help file for the `Florida` data set. What is the cite source for this data set?
7. Use the `View` function to look at the `Florida` data set. How many people voted for Gore in Flagler County?
8. Load the **carnegie** package.
9. Use the `carnegie` data set and the **ggplot2** package (loaded in **tidyverse** above) to make a bar graph of `BASIC2015` types.
10. Make a scatterplot to examine the relationship between `ROOMS` & `BACCDEG`. Make sure your plot avoids overplotting issues.
11. Make a histogram to examine the distribution of number of `ROOMS`. Set the `aes` (`x` position) and `data` globally in the `ggplot` function. After plotting with the default, adjust the binwidth to an interval of 250 wide.
12. Use **ggplot2** and the `qrev` data set you created above to make this Cleveland dotplot.