**Introduction:**

In this project, you'll be building a program in a few steps to perform what's called **sentiment analysis**. Programs like these are widely used in different companies and different situations. In this case, you'll be working with Gab data, although it's a fake data set. Gab is a social network application like twitter. You will eventually make a CSV file and use that to produce a graph of your results, which is a super useful way to visualize data and share the results of your programs you build.

Once you finish this project, you'd be able to build advanced programs with real data from different data sets from Facebook, Twitter, Yelp, Amazon, etc.  Once you create a resume for yourself, don’t forget to add this SENTIMENT ANALYSIS project to your resume 😉

To build this analysis in your eventual CSV file, I’ll guide you through different steps. In each step you will build different functions and at the end you will integrate them together to complete this program. As you proceed through the program, you should **focus on individual steps one by one and make sure that you understand the instructions** for each step before you move forward to writing the code. You should always focus on one step at a time because thinking about multiple steps in your program can often get overwhelming and can confuse you about what code needs to happen first and what should happen later. So make sure you focus on individual instructions for one step at a time. Build your plan and translate that into code as you work through the project. As you think about each step that you must work through, you should think carefully about what you know about functions. What the input for each function is, what its return value is and what each function has to do after the input and before it returns its final output. As you work on each function, you'll be able to put them together to build the full project.

Remember that in each step, you may also need to copy some work you have done earlier into the next step to come up with your complete program. As the project goes through different steps, it evolves into a more real and an actual program.

I think that this project is a particularly exciting way to think about how you can apply the concepts you have learned to things you might want to do in real life, so to speak. Understanding different things about how programs can apply to you. So good luck and have fun.

**Requested Submission:**

At the end of each step, the requested submission will be explained in details. **Be sure to correctly label your deliverable as requested!**

**Instructions for Grading:**

I will, personally, review your submissions to make sure that you have correctly delivered what you have been instructed. For the coding sections, I will check for the followings:

* **There is no hard coding.**
* There is no trace of your peers’ programming in your codes. All code will be checked for plagiarism by Canvas system.
* The program creates the requested output.

**Now, let’s begin!**