Assignment 07 – Using the Twitter API to access Twitter Data

For this assignment, you will use the Twitter API to search for tweets.

For this assignment, you can start with the example provided - **twitter_data.py -** which is in Python, although you may use another language if you prefer. A helpful source for twitter using python is https://www.tweepy.org

ASSIGNMENT:

- Write a program (or modify the given Python program) to retrieve some data from the Twitter API, and do some processing on that data as described below.
- ***Your program must follow the specifications and the programming guidelines provided below.***
- Write a one-page report describing your program: purpose, input, output, what it does, etc. The report must include the following ***labeled*** sections: PURPOSE; INPUT; OUTPUT; WHAT THE PROGRAM DOES; ADDITIONAL INFORMATION. The report should be submitted in .pdf or Word format, in a document ***labeled with your last name***, eg: Dugas_HW7_Report.pdf.
- Zip your report, code, and a **screen shot of any output** into a zip (compressed) file that is labeled, both inner and zip folders, with your last name, eg: Dugas_HW8.zip, and submit in Canvas. *Screen shots may be included in your report, but also must be included separately in the zip file*

PROGRAM SPECIFICATIONS:

NOTE: All programming for this assignment -- data search/retrieval and processing/analysis -- must be accomplished through a single program. Do not write two separate programs.

Write the following routine as a loop, so that the user can keep submitting twitter user names and getting results until they input STOP:

- Prompt the user for a Twitter User Screen Name. If the user enters STOP, end the program with an appropriate message and stop.
- Use the Twitter Screen Name to retrieve the following from the Twitter User Account and display them on the console with appropriate labels:
    - User Screen Name
    - User Name
    - User ID
    - User Description
    - Location
    - Number of Friends
    - Number of Followers
- Print the screen names of the most recent 5 followers of the Twitter User Account, with appropriate label
- Print the text of the Twitter User Account's most recent 5 tweets. Label each as TWEET 1, TWEET 2, etc., with a blank line between tweets
- Prompt the user for the next Twitter User Screen Name, unless they enter STOP.

PROGRAM GUIDELINES:

You may incorporate materials provided by the instructor, although you must add your own original content as well. Your grade will be based on your original content, so be sure and add significantly to what is provided.

Programs will be screened for plagiarism. If you "borrow" code, be sure to document the details of the source; otherwise it will be considered plagiarism and result in a zero grade for the assignment. Borrowed code will not count toward your grade, only original code will be considered.

Programming can be done in a variety of languages. Programs should employ good programming practices. An example is the use of descriptive variable and function names.

Annotation and Comments: ***IMPORTANT***

- Program header must include **your** name and assignment information (use comments).
- Comments must also be used at the beginning of the program to give an overall description of the purpose of the program.
- Comments must also include **detailed running instructions** to run in a terminal window.
- Comments should also be used throughout the code to explain what it is doing. It should be possible to re-create your program based on the comments alone. Poorly commented programs will receive poor grades.

Note for students traveling outside of the US:

Social media sites are sometimes blocked outside of the US. To get around this, you can use a VPN, either a commercial one or Stevens's VPN. For Stevens: IT Service Desk / Search Knowledge Base / Network / VPN