MIS 515 HOMEWORK 1:
NAME POPULARITY

Your assignment is to create a Python program that utilizes historical name popularity to perform two types of analyses. The program should first ask the user which mode they would like to use (name comparison or maximum popularity). If the user chooses name comparison, then the user should be asked for two names to compare. The program should compute the totals for each name (sum) between 1900 and 2014. The program should report totals for each name as well as which name was most common. If the user chooses the maximum popularity option, then the program should ask the user for a single name. The program should report the year between 1900 and 2014 in which that name was most popular. If the user chooses an invalid analysis, the program should alert them but allow them to perform another analysis.

Your program should utilize the **usa_baby_names.csv** file, which can be found on Canvas or online at http://dgoldberg.sdsu.edu/515/usa_baby_names.csv. The file consists of three columns: the first column contains a baby name; the second column contains a year; and the third column contains a frequency. An example of the first two rows is shown below.

Mary	1900	16782
Mary	1901	13194

Once an analysis is complete, the program should ask the user if they would like to run another analysis and allow the user to run an unlimited number of analyses.

Please use the following as a template for the tool's expected functionality:

```
Welcome to the baby name analyzer!
What analysis would you like to run (name comparison/maximum
popularity)? name comparison
Enter the first name to analyze: George
Enter the second name to analyze: Aaron
George was more popular than Aaron (1372747 to 556103)!
Would you like to run another analysis (yes/no)? yes
What analysis would you like to run (name comparison/maximum
popularity)? maximum popularity
Enter the name to analyze: Alice
Alice was most popular in 1921 with a frequency of 11991.
Would you like to run another analysis (yes/no)? yes
What analysis would you like to run (name comparison/maximum
popularity)? name awesomeness
Sorry, that type of analysis is not supported.
Would you like to run another analysis (yes/no)? no
```

When submitting your assignment, please upload a Python file (.py) to Canvas. If working in Google Colab, you can export your work as a Python file under File > Download .py.

Some considerations as you write your program:

- If working in Google Colab, you may choose to either utilize the **usa_baby_names.csv** file with drag-and-drop, or you may also choose to download it from http://dgoldberg.sdsu.edu/515/usa_baby_names.csv with wget. Either approach is acceptable. You do not need to submit the **usa_baby_names.csv** file with your assignment.

- There are a few potential sources of errors or unexpected issues that may occur when the user runs your program. You ***do not*** need to handle the following issues on this first assignment:

    - You ***do not*** need to handle issues of the URL being down and/or the file not being opened successfully.

    - You ***do not*** need to handle issues of the user entering a bad name (such as entering a name that is not in the file or entering the same name twice).

    - You ***do not*** need to handle issues of the user's input being in the wrong capitalization. You may assume that the user always capitalizes the first letter of each name (for example, "Aaron" rather than "aaron" or "AARON").

    - You ***do not*** need to handle issues of ties, such as the user entering two names with exactly equal popularity or entering names whose maximum popularity is tied in multiple different years.

- Ensure that your prompts and output are crisp, professional, and well-formatted. For example, ensure that you have used spaces appropriately and checked your spelling.

- Adding comments in your code is encouraged. You may decide how best to comment your code. At minimum, please use a comment at the start of your code to describe its basic functionality.