Homework 07

COMSC-122

Fall 2017

Homework-07A

- You will find two files in your Homework07 dropbox:
  - GirlNames.txt – which is a file containing a list of the 200 most popular names given to girls born in the United State from the year 2000 through 2009.
  - BoyNames.txt – which is a file containing a list of the 200 most popular names given to boys born in the United State from the year 2000 through 2009.
- Write a program that reads the contents of the two files into two separate lists.
- Then the user will be asked:
  - “If you are looking up a Girl’s name, enter ‘G’, if a Boy’s name, enter ‘B’: “
  - Next the user will be asked to enter the name that (s)he wants to look up.
- The application will then display a message indicating whether the name entered was one of the most popular or not.
- Then your program should ask if you want to look up another name.

Homework-07A

- Call your program: *YourName*-Hwrk7A.py
- Tip:
  - You might find programs 7-15 and 7-2 helpful in solving this problem.

Homework-07B

- Design a program that reads a textfile, **rainfall.txt**, containing the total rainfall in the Bay Area for each of 12 months, into a list.
- The program should calculate and display the following:
  - The Total rainfall for the year;
  - The average monthly rainfall for the year;
  - The month in which the maximum rainfall occurs;
  - The month in which the minimum rainfall occurs.
- Call your program: *YourName*-Hwrk7B.py
- It's not essential, but you may want to make use of a file called: **months.txt**, which contains a list of the names of the months of the year in order.
  - That file can be input to form another list called **months**[]

Homework07B

- Tip: The easiest way to do the last two parts of the program is to:
  1. Find the maximum(or minimum) rainfall for the year in the list you make of the rainfall data;
  2. Determine the index of that maximum(or minimum) element;
  3. Look up the month of the year, in a list of months, for which the index is the same as the index that you found in step 2.
- More Hints:
  - You may find Programs 7-17 and 7-4 helpful.
  - You may want to use the min and max methods.