Name (print)_____

Asgn # 3 Due Tuesday Oct 21

Dr. Kaminski - you have my word that:

1. I wrote this entire application myself in accordance with the guidelines in the course policies & syllabus and university policies of what's considered acceptable student academic conduct. Any code (longer than a couple lines) used in this assignment which was created by someone else (even if changed slightly) or was written jointly with someone else is both clearly attributed (in a comment in the code) and described on the BOTTOM OF THIS COVER PAGE.
2. The program code attached here **did** actually produce the data file which is attached here.
3. There was no editing of the data file after the attached program produced it (except perhaps the font, font size and/or page-orientation for printing).

Signature _____

Final score for the asgn is (0.8 * outputPoints) + (0.2 * programmingPoints) which comes out to: _____

(you can calculate this)

---------- **for GRADER (below)** ----------

_____ **OUTPUT (Log.txt AND CountryData.bin FILES) - on a scale of 0-100**

including showing CountryData.bin file using a HexEditor (or Linux' od)

NOTE: NameIndex is NOT USED in A3, even though A3Specs include it. So there is no printout of it in the Log file (by PrettyPrintUtility using the Backup file) and no transaction queries that use that index.

NOTE: The COMMON PrettyPrintUtility (java or cs) from the course website MUST BE USED as is, rather than each person writing their own slightly different version. That's important to ensure that the developer's CountryData FILE conforms to the specs rather than just having the data APPEAR correctly in the Log file, as was done in A1 and A2.

10 points off if they don't circle the required things in the HexEditor

The printout of the CountryData.bin file in the Log file is worth a total of 50 of the 100 points, including records being in their correct locations and the HP/Links being correct (and obviously, it's a binary file which follows the specs in terms of format).

(To developers: If your data file can't be read properly by the COMMON PrettyPrintUtility program because of problems such as: it's not a binary file OR fields are the wrong dataType or size OR there are no HP/link fields at the end of each record OR there is no headerRec OR the headerRec is the wrong size OR . . . there goes 50 points).

_____ **PROGRAMMING - on a scale of 1-100**

NOTE: NameIndex is NOT USED in A3, even though A3Specs include it. The NameIndex class is not included in the set of code files submitted. Calls to methods in the NameIndex class may be deleted from the remaining code files OR they may just be commented out.

50 points off if selectByCode does a linear search of the whole file or of the whole collision area rather than the proper hash search (i.e., first check the home address, then search the chain for this synonym family)

15 points off if there is no private hashFunction method in DataTable (or DataRecord) class.
The method must do all steps of the specified hash function, and nothing more.
It may NOT just be in-line code embedded in other methods like insert and selectByCode.
There may NOT be more than one hashFunction method in the whole project.
The method name must be hashFunction.

50 points off if the whole dataTable is first constructed in array(s) in memory (like was done for A1), and then dumped to the CountryData.bin file at the end of Setup.