Asgn 1 Demo Specs (& Related Notes)

CHANGES to make BEFORE Running the Demo

AutoTesterUtility The 3 parallel arrays need to have these values (in this order):

```
{"A2Z",  "A2Z",  "All", "Dup"};
{"A2Z1", "A2Z2", "All", "Dup"};
{"All",  "10",   "30",  "All"};
```

Setup The default value (in the ELSE clause of the if (ARGS.Length > 0)) needs fixing:

```
else
     fileNamePrefix = "A2Z";
```

UserApp The default value (in the ELSE clause . . .) needs fixing:

```
else {
     fileNamePrefix = "A2Z";
     transFileNamePrefix = "A2Z";
}
```

ShowFilesUtility The default value (in the ELSE clause . . .) needs fixing:

```
else {
     fileNamePrefix = "A2Z";
     nRecToShow = "All";
}
```

##

WHAT TO DO FOR THE DEMO

1. The 3 RawData.csv files & 5 TransData.txt files are in the correct folder in your project
2. Run AutoTesterUtility
3. Then MANUALLY, YOU run Setup program, then UserApp program, then ShowFilesUtility (which all use the defaults specified in the `else`'s shown above).
4. Print LogSession.txt file in NOTEPAD (or WordPad or…).
   a. *Use a FIXED-WIDTH FONT (like Courier New) so record fields line up nicely.*
   b. *Use a SMALLER FONT size and/or LANDSCAPE orientation to stop wrap-around (or truncated) lines.*
5. Print DupMainData.bin from the HexEditor (or use Linux' od). [NOTE: The HexEdit program you use must print both the HEX & CHAR versions).
6. Print all of your program code files.
7. Circle what I've described below (by hand).

WHAT TO HAND IN **(in the order specified below)**

1. Signed Cover sheet
2. Printout of the LogSession.txt file - CIRCLE THE FOLLOWING for the **Dup** data set run:
   a. The `"ERROR - DUPLICATE ID … . . ."` messages
   b. The ListAllById results
3. Printout (from HexEdit or od) of **Dup**MainData.bin file
   CIRCLE THE FOLLOWING in the HEX section (not the CHAR section):
   a. n, maxId *[as 2 individual fields]*
   b. The record at RRN 3 *[as one single record]*
   c. The "record" (an empty location) at RRN 5 *[as one single record]*
   d. All of the 9 individual fields for the record for GBR
4. YOUR program code: *(IN THIS ORDER) (There are at least 7 actual separate files]*
   Setup program
   UserApp program
   ShowFilesUtility program (if you wrote your own or modified one from the website)
   RawData class
   UserInterface class
   DataStorage class
   any other code files/classes you used in your program

##

HOW MUCH COMMENTING IS NEEDED?

- **Self-documenting** code including:
  - descriptive **NAMING** of programs, methods, classes, objects, records, fields, namespaces/packages, variables, constants, etc. *[according to conventional C#/Java naming conventions]* – AND using the same naming as used in my **SPECS** (so "everyone's on the same page")
  - good **MODULARIZATION** (using OOP for Setup and UserApp, short modules, sharing of the classes) and using the modularization described in the specs and in class (so "everyone's on the same page")
  - following the **REQUIREMENT SPECS** closely, so that your "boss's" specs act as a form of external documentation (which does NOT need repeating within your program).
- A **top-comment** on each physical file with: the module name & the code author's name & the overall app name
- A **comment-line-of-*'s** between chunks of code (e.g., methods, constructor, …)
- Comments on **tricky code** or unusual ways of doing things or things which don't follow the specs (since a maintenance programmer would read the specs and ASSUME that the program would OF COURSE follow them)
- You do **NOT need line-by-line** commenting

NOTES:

- Re-read specs for A1 to make sure you're doing everything right (to maximize points)
- QI & LI transactions MUST use methods in DataStorage class

NOTES on DataStorage class methods

- QueryById MUST use DirectAddress search – **linear search → 0 points**
- ReadOneRecord is overloaded – one version for sequential read (no RRN specified) and one version for random read (RRN specified)
- Do not do special checking for ID's > MaxId – just use ReadOneRecord and let it naturally determine that it's an empty location
- ListAllById does **NOT show holes**! ! ! !
- **DeleteById is a DUMMY STUB**