Augmented "Comet" Database

4th field showing count of added lines

HALLEY'S	76	2037	0
WIRTANEN	5	2019	2

Methane 0.57

Water 0.34

STEPHAN-OTERNA	25	2028	1

Water 0.88

Lab 4 Mission:

- Deal with augmented database format
  - New private variable(s)
  - Modify algorithms to rd/wrt disk file
  - Added lines are multi-word…. Dang!
- Overload the >> and the << operators so that an entire comet is dealt with in a single operation. E.g. inStream >> object

Pseudo-code

- Read first 3 fields as usual
- Read new 4th field with   cin >> lineCount
  - *What is next char in stream at that point?*

- IF lineCount > 0
  - Gobble the '\n' character
  - Create dynamic storage, string[ ] of necessary size
  - For each line
    - Read **line** into storage with getline()
    - Advance to next line
    - Advance to next storage

Issues:

- Got to delete [ ] dynamic storage when done
  - C++ automatically calls "destructor" (*if there IS one*) when object falls out of scope
  - Pointer to storage must remain unchanged, so that delete [ ] command will work. Use temp pointer for looping/advancing
- Want to overload >> and << to do whole Comet
  - >> MUST return a value of ifstream&
  - << MUST return a value of ofstream&