Part 1: Report
Andy Triculescu
Section 209

Object oriented techniques:
- Classes/Objects → Used Database class which implements library
- Encapsulation → I put in all of the components of finding the occurrences within the library within one method which referenced finding occurrences in another method. Also the data regarding the location of the lib files was kept within the methods and not made public (get and set library file)
- Inheritance → All of the methods from library were inherited in Database
- Composition → Scanner and utils were imported at the beginning to transform the class by implementing other objects
- Method overriding → by implementing the methods from the interface I over-rode the methods and used my own instead

Library methods inherited
- setLibraryFile – in this method I used encapsulation by not announcing what library file was being set
- getLibraryFile – in this method I also used encapsulation by not letting the user view the directory itself and just returning the file. I also used a global private variable for the lib location previously set in setLibraryFile
- getLibraryBooks – in this method I used try-catch loops to make sure that if an error arose such that there not being a file, it would be caught and handled properly
- getNumberOfBooks
- getLibraryOccurrences
- getLibraryNewlinePercentage
- getBookOccurrences
- getBookNumLines
- getBookNewlineCharacters