CS 121 Bruce Bolden April 6, 2016 Program #4 20 Points

Due: April 17, 2020

Objective: Write a program to hold information for a small TV show database using a binary search tree. Specifically, the show names, years, category, and the actor/actress names.

Program Description: One method of storing this information is to hold the information in a tree structure. Another method of storing this information is in a hash table. Your program is to store information in a binary search tree based upon the TV show name or actor name (your choice).

Requirements:

- 1. Write functions to:
 - Display all shows in the tree (only the titles!).
 - Display all actors of a given show in the tree: *The Saint, Benson, Dexter's Laboratory*, and two others of your choice.
 - Display all shows of a given actor: Tim Conway, Clint Eastwood, Marilu Henner, Tress MacNeille and two others of your choice.
 - Display all shows released between 1983 and 1993 and one other decade range of your choice.
- 2. Test your program:
 - Read TV show information from an external file (on the web).
 - Display all output in a useful manner.

Deliverables:

- Program—fully documented.
- A program design sheet. Describe all classes and methods needed to implement your program.
- Programming Log:
 - Record the time required to design and implement your program.
 - Record of things you encountered/learned while implementing your program.
- Output—proof that your program worked.

If you have any questions regarding this assignment, do not hesitate to contact me. Start working on this assignment as soon as possible.