CS 2 – Homework 1 Possible Points: 110

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**NBA Player Stats**

Write a C++ program that keeps track of professional basketball players’ statistics addressing the following requirements at a minimum.

1. Program must declare and use a **struct** to store player’s stats (player’s name, team name, points, rebounds, and assists). (10 points)
2. Program may store max of 100 players’ stats.
3. Using a function program must read the existing players’ stats from players.txt file – see the sample file provided. Data value is stored in the following order for each player: player’s name, team name, points, rebounds, and assists on each line. (10 points)
4. Your program must be menu driven, giving the user various choices. (20 points)
5. Your program must use a function to display players’ stats in a cleanly formatted tabular form. (20 points)
6. Use functions to search the array to find the index of a specific player, and update the data of an existing player. (20 points)
7. Use function to add a new player’s stat. (10 points)
8. Before the program terminates, give the user option to save data into the same players.txt file. (10 points)
9. **Bonus 10 points.** Use a function to sort the players’ stats based on player’s name and display the sorted array.

**Other requirements:**

1. Write date, programmer and brief program information as comments at the top of all the source files.
2. Follow best programming practices:
   1. Write adequate comments. Comments can help you plan and think through.
   2. Do NOT use global variables; constants are okay.
   3. Use indentation and whitespaces to cleanly format your code.

**Deliverables**

1. **Upload the source file(s) hw1.cpp, etc., into D2L Homework 1 dropbox before the due date.**

Note: You may submit partial program for, well, partial credit.