# CS265: Advanced Programming Techniques

Spring 2022

*Assignment #2*

**What to do**

* This assignment is called “Sixers Players”
* You must develop everything on the Drexel tux.cs.drexel.edu servers
* You must write your name on the submission

**Requirements**

Write a C program, named sixers.c, to solve the following problem:

1. Provided with the assignment is a sixers.csv file that contains information about sixers players. The format of the file is as follows

player,salary,season

player,salary,season

player,salary,season

…

1. The meaning of the file is that a given player has played for the sixers during a given season earning a given salary.
2. If the player has played for the sixers for more than one season, the same player will appear multiple times in the file.
3. You may assume that the file does not contain the same season for the same player more than once.
4. You may not assume that the file is sorted.
5. You may assume that the player’s name and season are no longer than some number of your choice, say 100 characters.
6. You may assume that the filename and each line in the files are no longer than some number of your choice, say no larger than 256 characters.
7. You may assume that no extra whitespace appears before or after the tokens of the file (i.e., at the beginning / end of line, or before / after the commas).
8. The program should read the input file and do appropriate error checking before proceeding.
9. If no input file is provided in the command line, the default sixers.csv must be assumed.
10. The program should create an internal data structure for representing the file based on linked lists. One example data structure is depicted below.

Diagram

Description automatically generated

1. At the end the program should answer the following 3 questions:

Question 1: Find the player that played the most seasons for the sixers. Show the player’s name and number of seasons.

Question 2: Find the player that earned the most salary across all seasons the player played for the sixers. Show the player’s name and max salary earned.

Question 3: Find the player that earned the most salary during one single season playing for the sixers. Show the player’s name and max salary earned.

**What to submit**

Submit the C program sixers.c in Blackboard.