CS1050 – Prelab 9

Spring 2019

Concepts to Practice

- File Processing

Description

For the prelab assignment, you need to implement a program that reads data from the provided stats.dat file into two arrays. One array will be an array of strings that will hold the names of baseball players. The second array will be an array of floats that will hold the batting averages of each baseball player. After reading data into these two arrays, you will print the arrays to the screen as shown in the sample output.

With regard to the data file, you can assume that baseball player names will not have a space in them, and that there will be a space after the player name and before the batting average. You may also assume that no player name will be longer than 256 characters (including a null-terminator). You also may assume that there will be no more than 10 players and corresponding batting averages.

The name of the data file (which is included and can be downloaded from Canvas) is prelabstats.dat.

Functions You Must Write

You may write any functions you wish to implement this program, in **addition** to the following functions. However, you **must** implement the following functions, and they must be prototyped as shown:

- **int FillArrays(char Names[][256], float Avgs[],char * FileName)** – This function takes an array of player name strings, an array of player batting average floats, and a string indicating the file that contains the data. The function should open the data file and read data from the file into the Names and Avgs arrays until there is no more data in the file (i.e., "end of file"). The function returns a count of the total number of players read.
- **void PrintArrays(char Names[][256], float Avgs[], int count)** - This function prints the player names and batting averages from the given arrays, for each entry up to the count of entries.
- **int main(void)** – You will need to write a main().

Sample Output

```
JimR@JimRArea51:$ compile prelab9.c
JimR@JimRArea51:$ ./a.out


Today's lineup:

MattCarpenter: 0.206
PaulGoldschmidt: 0.212
PaulDeJong: 0.222
MarcelOzuna: 0.241
YadiMolina: 0.121
DexterFowler: 0.182
HarrisonBader: 0.217
KoltonWong: 0.423
AdamWainwright: 0.000
```