

CSCI 513.01W – Python Programming for AI

Assignment 3

In this assignment we are going to read a text file that contains the results of NBA games. The file is called *nba.txt*, and has the following information for each game: the name of the two teams, their respective scores, and attendance number. Your task in this assignment is to read the file, determine the number of wins each team had, and store the result in a text file called *wins.csv*. Write a Python program using Spyder (or any other IDE) to:

1. Read the *nba.txt* text file
2. Create a dictionary where the key is the team, and the value is the number of wins
3. Write the contents of the dictionary in a new file called *wins.csv* where each line represents the team's name followed by the number of wins. Make sure that the values in each line is separated by a comma.

When we open the csv file that the program saved, we should get the following:

	A	B	C	D
1	OrlandoMagic	12		
2	BostonCeltics	23		
3	MemphisGrizzlies	14		
4	NewYorkKnicks	20		
5	NewOrleansPelicans	17		
6	DenverNuggets	20		
7	LosAngelesClippers	23		
8	MinnesotaTimberwolves	20		
9	BrooklynNets	10		
10	ClevelandCavaliers	19		
11	ChicagoBulls	17		
12	IndianaPacers	18		
13	MilwaukeeBucks	19		

Helpful Hints:

- Your program needs to work with two files, one file for input and the other for output.
- All data read from a file will be of string type. Do not forget to convert to integer if you want to work with numeric data instead of string data. `int ()` function will be helpful here.
- It is easier to first read the entire file as one string using the `read ()` function, then split the string into separate lines. Another way, is to read from the file one line at a time.
- A csv file is just a text file with a `.csv` file extension where the values are separated by a comma.

WHAT TO HAND IN:

Submit your project electronically through D2L by attaching and submitting your Python program file (assignment3.py).