Programming Exam 8

Date/Time: 2023.05.23 08:10 - 09:00

(程式檔命名學號_quiz8.py,上傳至 Moodle PE8 上傳區)

Problem: Simple Analysis on NBA 2022-23 Standings

Your task is to Write a Python program to reads the NBA 2022-23 standings from a CSV file named "**nba_standings.csv**". The CSV file contains multiple columns, and the first 9 columns with their meanings in order are: Conference (Eastern or Western), Team, W-L (Win-Loss Record), PCT (winloss percentage), GB (game back, how far behind the team is from the leading team), PF (points for), PA (points against), Home (home record), Away (away record). Based on the CSV file, you are asked to answer the following three questions.

- (1) Which teams from the Eastern Conference had a win-loss percentage greater than 0.5 during the 2022-23 NBA season?
- (2) Which teams from the Western Conference had a lower win rate at home games compared to their away games during the 2022-23 NBA season?
- (3) What was the average difference between points scored (PF) and points allowed (PA) for teams in the Eastern Conference that had a win-loss percentage greater than 0.5?

No Sample Input and Output for this PE. By running your program, make sure the answer to each question is clearly presented. You can decide the output format by yourself.

Note: You need to write comments (註解) for each part in your code.