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Práctica de Laboratorio

Problem Description

You are tasked with creating a program that processes player scores from a video game. Each score is stored in a node of a singly linked list. Each node contains the following attributes:

- **Player ID:** An integer representing the player's unique identifier.
- **Player Name:** A string representing the player's name.
- **Score:** An integer representing the player's score.

Your program must perform the following tasks:

1. Read player data (Player ID, Name, and Score) from an input file and store it in a singly linked list.
2. Compute and display the average score of all players.
3. Identify and display the player with the highest score and the player with the lowest score.
4. Implement a function to remove all players whose scores are below the average. Measure and display the execution time of this function.

Input Format

The input file contains multiple lines, each representing a player's data in the following format:

PlayerID PlayerName Score

where:

- **PlayerID** is a positive integer.
- **PlayerName** is a string without spaces.
- **Score** is a non-negative integer.

Output Format

Your program should output:

1. The average score of all players.
2. The Player ID, Name, and Score of the player with the highest score.
3. The Player ID, Name, and Score of the player with the lowest score.
4. The execution time of the function that removes players with scores below the average.

Constraints

- $1 \leq \text{Number of players} \leq 10^5$
- $0 \leq \text{Score} \leq 10^6$

Sample Input

```
1 Alice 85
2 Bob 90
3 Charlie 78
4 Diana 92
```

Sample Output

```
Average Score: 86.25
Highest Score: PlayerID=4, PlayerName=Diana, Score=92
Lowest Score: PlayerID=3, PlayerName=Charlie, Score=78
Time to remove players below average: 0.0023 seconds
```