Programming Assignment (in-class) : Leaderboard Management System

You are required to implement a **dynamic leaderboard system** that maintains a list of players and their scores. The program should allow users to **insert, update, remove, and display top-ranked players** by reading commands from an **input file**.

Operations to Implement:

1. **INSERT name score** → Adds a new player to the leaderboard. After each insert, once the Tree is balanced print the partial tree.

    o   If the player already exists, update their score.

2. **UPDATE name score** → Updates an existing player's score.

3. **REMOVE name** → Removes a player from the leaderboard.

4. **TOP k** → Displays the top **k** players ranked by score.

The system should dynamically manage player data to ensure **efficient operations** for insertion, deletion, and ranking.

Instructions

- The provided program contains missing code segments that you need to complete.
- The program reads input from a file and processes leaderboard commands.
- Your task is to fill in the missing logic to ensure correct insertion, deletion, and ranking operations.
- The program should handle dynamic data efficiently.