DSA ASSIGNMENT -1

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Develop the system for the cricket information portal as mentioned below:
- Inputs for the portal:
  - playerFirstName, matchDate, runScore, wicketTaken, roleInTeam (Bowler/Batsman)
- The portal has following functionalities:
  - Add match in information
  - Display match information
  - Display player-wise maximum 3 run scored (in descending order) details. i.e.

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Player Name: Virat Kohli
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matchDate	runScore
9/10/2023	87
11/10/2023	45
14/10/2023	36

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…….. (other player details)

  - Find and display top 3 bowler (using total run) and top 3 batsman (using total wickets). You must have same number of records for each player.

Use best suitable data structure to implement the above portal.

Overview:

The System is designed to manage the cricketer statistical information and his matches performance. It collects cricketer data including name , role , runScored , wicketTakens & lastly Matchdate. Further we have also taken Matchdate as an input if any user wants to know about the data of any cricketer for that particular match.

The System efficiently organizes and processes cricketer statistical data.

Data Structures Used:

Vectors -> Stores the Cricketer name.

Maps -> Use to organise and retrieve cricketer details

Linked List -> Used to Link Player's Data with Particular Match date

Output Generated:

Generates Reports:

- Full cricket database including all information of players statistical information
- Match-wise display's the cricketer's runs or wickets
- Top 3 Cricketers along with their data as runs or wickets on the particular matchDate
- Identification and report of the cricketer who didn't play well
- Cricketer Details according to the user input match-date

Purpose:

- Efficiently manages and organizes the player statistical data
- Provide quick access to individual cricketer reports
- Offers a clear representation of the top-performing players