- 1. You have to write a program to take input from an <u>input file</u>. The input file name will be taken from the console at first. For example, here it is "input.txt". An example of the contents of an input file is given at the end.
- 2. Then you have to take input from the file and store the information in an array of structures about the **Bangladesh Cricket Team**.
- 3. Then you have to show an infinite loop to show a prompt like below and you have to take a choice input from the console to show the result corresponding to the option.
 - A. Show All Players
 - B. Show A Particular player information (Provide Player Name)
 - C. Show the MOST Experienced Player (MEP)
 - D. Show the New Commer Player (NCP)
 - E. Show the Top Scorer Player (TSP)
 - F. Show the Hard Hitter Player (HHP)
 - G. Show the Highest Run Taker Player (HRTP)
 - H. Show the MOST Valuable Player (MVP)
 - I. Show the Allrounders
 - J. Exit/Quit

- **4. Show All Players**: Write the information of all players in a new **file** named "Player info.txt".
- **5. Most Experienced Player (MEP)**: The player who played most matches among others.
- **6. New Commer Player (NCP)**: The player whose age is lower than all other players.
- 7. **Top Scorer Player (TSP)**: The player whose total runs is highest among all.
- **8.** Hard Hitter Player (HHP): The player whose average run per match is highest among all players.
- **9. Highest Run Taker Player (HRTP)**: The player whose highest run in a match is higher than all other players.
- 10. **Most Valuable Player (MVP)**: The player whose value is higher than all other players. The value of a player is calculated according to the following formula.

$$Value = age + match + totalRuns + highestRun + \left(\frac{totalRuns}{match}\right) + \left(\frac{highestRun}{age}\right) + AllRounder? 50: 0$$

Mark Distribution: 10

- 1. Properly taking inputs from the file. (2)
- 2. Properly using structures. (2)
- 3. Proper implementation of the functions. (4)
- 4. Properly showing outputs. (2)

Submission guideline:

Solve the problem in a single C file. Create a folder with your student ID. Put the source file (only .c file) into the folder. Zip the folder and submit it in **LMS**. If your ID is 12345, the zip file should be 12345.zip.

Deadline: 18-12-2023 (11:59 PM) Please remember this is a strict deadline. Under no

circumstances, this deadline will change. Failure to submit during the deadline will result in zero grades.

DO NOT COPY from the internet, seniors, batchmates, or any other sources. You are always welcome to discuss and find the solutions together, but you must write your own code. If found out, there will be -100% marks reduction.

DO NOT PUT the question in chatGPT and ask it to write the answer. You may use the tool to learn more about the concepts or take additional help (such as how to use certain methods or how to do certain concepts) but do not directly use it to write code for the problem. If found out, there will be -100% marks reduction.

```
Mehidy Hasan Miraz
                                He play most lowest playing match And Allrounder
Allrounder
775
100
Mohammad Mushfiqur Rahim
                                  He play hight Match
Wicketkeeper Batter
243
6945
144
Mohammad Mahmudullah
                                       Allrounder
Allrounder
218
4950
128
Mustafizur Rahman
Bowler
                                     He is One Day International
86
3531
142
Shakib Al Hasan
                                      Allrounder
Allrounder
228
7069
134
Tamim Iqbal Khan
Opening Batter
                                He top Top Scorer in match
235
                                And Highest Run Taker or MOST Valuable Player
8146
158
//Full Name
//Age
//Player Role
//ODI Match
//Total Runs
//Highest Run
```