

Lab 08
OOP – BCS

Note: Use const wherever possible, otherwise you may face syntax errors later

Consider practice11.cpp & T20.txt file already shared in practice 11, however files are shared in lab folder as well, download them and run to verify the working.

Task 1: Add following member function in PlayerList class and run main function:

- a. Search player in the list by matching first name, if found, display complete record of the player, otherwise display message that player is not in the list:

void searchByFirstName(char *nam)

- b. Compare total runs of each player and display records of players having score greater than equal given runs. To show players call **showlthPlayer** function in Player class

void

showPlayersGreaterThanOrEqualToRuns(int runs)

- c. Sort Players on the basis of average from highest to lowest (in descending order). For sorting, you have to write copy constructor & assignment operator in Player class. Finally, you may require to write empty non-parameterized constructor of class Player

void sortPlayers ()

```
int main(){
    int temp;
    PlayersList list;
    list.searchByFirstName("Babar");
    cin>>temp;
    list.showPlayersGreaterThanOrEqualToRuns(25000);
    cin>>temp;
    list.showPlayersGreaterThanOrEqualToRuns(2500);
    cin>>temp;
    list.sortPlayers();
    list.showAll();
    return 0;
}
```

Task 2: Create a class Team with 11 player side. Team should have some name of maximum 30 characters and eleven players. Use PlayersList class after sorting players and select top 11 players in the team. For this you may have to add **getPlayer** function in PlayerList class. Write following member functions and call them in main to show functionality:

```
int main(){
    PlayersList list;
    list.sortPlayers1();
    Team team("ABCDEF", list);
    team.showTeam();
    return 0;
}
```

- a. Write constructor to set team name and set players from Player List

Team(char *teamName, PlayerList&)

- b. Show team name and eleven players. To print players, show same function used in show function of PlayerList class

void show()

END OF LAB (Best of Luck)
