Inha University in Tashkent

Object Oriented Programming 2 – **MSC1052 Spring 2020**

**Practical Laboratory Assignment # 3**

**Topic covered:** Programming assignment that involves const member function, friend function, composition, friend functions and this pointer

**1** Define a class FullName and Player with the following specification and also make **appropriate functions const.**

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| **FullName** |
| -FirstName:string  -MiddleName:string  -LastName:string |
| <<constructor>>+FullName()  <<destructor>>+FullName()  +setFirstName(string)  +getFirstName():string  +setMiddleName(string)  +getMiddleName():string  +setLastName(string)  +getLastName():string |

|  |
| --- |
| **Player** |
| -Player\_ID:string  -Player\_Name:FullName  -Matches\_Played:int  -Goals\_Scored:int |
| <<constructor>>+Player()  <<destructor>>+Player()  +setPlayer\_ID(string)  +getPlayer\_ID():string  +setMatches\_Played(int)  +getMatches\_Played():int  +setGoals\_Scored(int)  +getGoals\_Scored():int  +setPlayer\_Name(string,string,string)  +getPlayer\_Name()  <<friend>>+Increase\_GoalsScored(Player &,int ) |

**Special Note : In class diagram + for public, - for private**

Increase\_GoalsScored(int ) is friend function for Player. Create separate header files for above classes (fullname.h and player.h).

Write C++ program create object pointer to Class Player and menu driven program to

1. add player details (allocate memory for object and get player details) ,
2. display player details,
3. increase player goal scored
4. delete player from memory

***Student has to upload assignment within laboratory time*.**