

THE UNIVERSITY OF LAHORE



CLASS ASSIGNMENT 3: SECTION - T

OPERATOR OVERLOADING:

Your task is to write a C++ program to create and test a class called Date that represents a date.

Data members:

- An unsigned month to hold the month of the date
- An unsigned day to hold the day of the date
- An unsigned year to hold the year of the date
(*Sample, July 4, 1776, is month 7, day 4 and year 1776*).

Member Functions:

- A default constructor which initializes the date to January 1st, 1
- An explicit constructor which initializes the object to a Date with given month, day and year.
receives: a month, a day and a year
- A mutator(set operation) SetYear() which sets the date with given month, day and year.
receives: a month, a day and a year
- An accessor(get operation) GetYear() returns the date's year
- An accessor(get operation) GetMonth() returns the date's month
- An accessor(get operation) GetDay() returns the date's day

Overloaded < operator:

- Receives another Date object D
- Returns: true if and only if the parameter Date D is after the date itself, otherwise false

Overloaded << operator (friend function): output date as format mm/dd/year

Overloaded input operator (friend function)

MAIN PROGRAM:

- Write a test program to test all the above functions.
- Create two Date objects(yearOne, yearTwo), yearOne with default constructor and yearTwo with the explicit constructor.
- Output the above two Date objects.
- Re-set yearOne to a new date and output the new date's year.
- Compare yearOne and yearTwo, and output the greater one.
- Create a third Date object dateThree with default constructor, then input new month, day and year values to dateThree with overloaded input operator and display it with overloaded output operator.