

Lab 05

Exercise 1:

- Create a class **Date** having following private data members:
 Int Day
 Int Month
 Int Year
- Create an object of Date "**date1**" and run your program

Exercise 2 [Default Constructor]:

- Write a default Constructor of Date that initializes the object to 1st January 1926 and prints "*Default Constructor Called*" in start
- Now run your program and test what does date1 prints?

Exercise 3 [Print Function]:

- Implement a function **Print** in Date class which prints a date in following format:
 dd/mm/yyyy (e.g. 1/1/1926 for date1)
- Print object date1 in your main function and run the program.
- What does it print and how can we initialize the data of date1 at the time of creation?

Exercise 4 [Overloaded Constructor with Default Argument]:

- Write an overloaded Constructor of Date class that initializes the date object to date, month and year provided as parameter and prints "Overloaded Function Called"
- Now create another object **independanceDay** in main that is 14/08/2018
- Print **independanceDay** by calling Print function of Date class and run your program

Exercise 5 [Destructor]:

- Write Destructor of Date class that prints "Destructor called"
- Run your program and test it

Exercise 6 [Input Function]:

- Write a function **Input** in your Date class that takes input from user to populate a Date object
- Call "*date1.Input()*" and "*date1.Print()*" in your driver program and test it

Exercise 7 [Setters]:

- Create an object **xmasDay** using default constructor
- Print xmasDay and see what it prints
- Write Setters i.e. SetDay, SetMonth and SetYear in your class
- Now set xmasDay to 25/12/2018 using Setters in main

Exercise 8 [Getters]:

- Write Getters i.e. GetDay, GetMonth and GetYear in your date class
- Now print xmasDay using Getters in your Driver program

Exercise 9 [Built-in Assignment Operator]:

- Create an object **temp** of Date class
- Assign value of xmasDay to temp
- Print temp and test your program

Exercise 10 [Passing object by value]:

- Write a function **int Compare(Date)** that compares two dates, returns 1 if left hand side object is greater than right hand side object, -1 if lhs is smaller and 0 otherwise
- Test your function

Exercise 11 [Return object by value]:

- Write a function **Date IncrementMonth()** that returns a newly created Date object with one month next to the current date object. For example, if `date1 = 2/01/2016` `date1.IncrementDate()` will return 2/02/2016 without changing date1
- Print both the date1 and newly created date in your driver program to test the result