Gandaki College of Engineering and Science

Lab 3.2 (Class object + Friend Function + Passing object as a argument)

1.

Create two classes **ABC** and **XYZ**, having one integer member variable and a member function to get the input. Now, create a function **max()** which takes as arguments objects of **ABC** and **XYZ** and displays the greater of the two. Declare this function friend functions in both classes.

2.

Create a class called **time** with private data items hours, minutes and seconds. Write inside the class an input function that accepts inputs from the user. Write another outside the class definition that takes as arguments two objects of class **time** and returns another **time** object that holds the sum of the two **time** variables passed as arguments.

3.

Calculate the mean of two private values of class **sample** using friend function.

4.

Write a C++ program to swap the private values of two classes using friend function.

5. WAP to add two objects each having private data members feet and inches.

6.

Write a C++ program to add two complex numbers using friend function. Use the concept of passing of arguments to the function and returning objects to perform the task.

7. Create two classes DM and DB which store the value of distance. DM store distances in meters and centimeters and DB in feet and inches. Write a program that can read values for the class objects and add one object of DM with another object of DB.

Use a friend function to carry out the addition operation. The object that stores the results may be a DM object or DB object, depending on the units in which the results are required. The display should be in the format of feet and inches or meters and centimeters depending on the object on display.

8. Define a class to represent a bank account. Include the following members:

Data members: Name of the depositor, Account Number, Type of account, Balance amount in the account

Member Function: To assign initial values, To deposit an amount, To withdraw an amount after checking the balance, To display name and balance

Write a main program to test the program.