Assignment 5

i. Write a program defining a class named **Complex** with two data member real and imaginary . Use necessary member functions for input/ output and define a member function that adds the two complex objects and return object. Also display the result using a member function display().

ii. Write a program defining a class named **Account** with account no and balance. Define the necessary functions to get data, display and money transfer. Prompt the user to transfer money from one account to another and adjust the balance. Solve this problem using pass objects by reference. Write a main() program to exercise this. (using inside and outside the class)

iii. Create a class named **Test** and perform class test for assigning values and copy constructor and needed function for display. Use copy constructor to pass two values code and price.

iv. Create a class named **'Rectangle'** with two data members- length and breadth and a function to calculate the area which is 'length*breadth'. The class has three constructors which are : 1 - having no parameter - values of both length and breadth are assigned zero. 2 - having two numbers as parameters - the two numbers are assigned as length and breadth respectively. 3 - having one number as parameter - both length and breadth are assigned that number. Now, create objects of the 'Rectangle' class having none, one and two parameters and print their areas.

v. Suppose you have a Piggie Bank with an initial amount of $50 and you have to add some more amount to it. Create a class 'AddAmount' with a data member named 'amount' with an initial value of $50. Now make two constructors of this class as follows: 1 - without any parameter - no amount will be added to the Piggie Bank 2 - having a parameter which is the amount that will be added to the Piggie Bank Create an object of the 'AddAmount' class and display the final amount in the Piggie Bank.

vi. Create a class **Rectangle** with two data members length and breadth. Declare the function needed for area and display. Use parametrized constructor (implicitly and explicitly) to solve this problem.

vii. Create a class **Employee** with data id, name, salary. Create constructor for those data and display only those employees whose salary is greater than 5000.

viii. Create a class Add with the data length and breadth. Create constructor for those data and display the result of sum of area of two rectangles (finding the area of two rectangles separately and sum the area). Also create destructor.