**C++ Assignments**

1. Define a class to represent a bank account as below:

Data Members:

 Name of the depositor

 Account Number

 Type of account

 Balance

Member Functions:

 To assign initial values

 To deposit an amount

 To withdraw an amount < amount available

 Display the name and balance

2. Write a C++ program to add two complex numbers.

 i) The class Complex contains three constructors.

 a) One with no parameter. (Used for the object for storing result.)

 b) With one parameter(Same value for real and imaginary part)

 c) With two parameters.

 and

 ii) Two friend functions

 a) One to add two complex number by taking two reference variables of class

complex and returning another reference.

 b) To display the result.

3. Check whether a number is even or odd by overloading ! operator.

4. Class Distance consists of length in feet and inches.

i) one default constructor

ii) one parameterized constructor

iii) function getdata() to take the value of feet and inches.

iv) overload cout operator to display distance.

v) Overload < operator to compare two distances.

5. Concatenate two strings by overloading + operator and Overload == operator to compare two strings.

6. Write a program to create a class shape with functions to find area of and display the

name of the shape and other essential component of the class. Create derived classes

circle, rectangle and square each having overridden functions area and display. Write a

suitable program to illustrate virtual functions.