**Tutorial 5**

**Implement the following programs in C++ language**

1. Create a class **Integer** that has two integer values as private data member. Provide a default constructor to initialize both the values to 0. Also provide a parameterized constructor that initialize values 1) by calling constructor explicitly 2) by calling constructor implicitly.
2. Create a class **Compound\_Int** that calculates the compound interest based on principal amount, number of years provided by the user. Use constructor to calculate the interest with rate of interest as default argument equal to 9.5%.
3. Create a class named **Complex** that adds two complex numbers. Use default constructor to initialize the values and a member function **sum()** which returns the summation of this two complex numbers.
4. Perform Program 3 using multiple constructors to initialize the values.
5. Create a class named **Factorial** to calculate the factorial of a given number using Copy Constructor.
6. Create a class **Count** that has an int as its single, private static data member. Provide a constructor that counts the number of objects created by the user.
7. Create a simple class **Integer** that has an int as its single, private data member. Provide a constructor and destructor for the class, and use them to output messages that tells user when objects are created and destroyed.