<u>**B.Tech CSE 3rd Sem**</u>
<u>**OOPs with C++ (IT-255)**</u>
List of Programs

1. WAP to implement Call by Value and Call by Reference in C++. Use Call by Reference to swap two integer values.
2. WAP to implement a function to calculate the simple interest. Use the option of default value of rate of interest if it is not entered by the user.
3. WAP to implement function overloading for a user defined Power function i.e. raise a number m to a power of n. Use this concept for calculating power when m is an integer as well as when m is a double.
4. Define a class to represent a complex number and include the real part and the imaginary part as data members. Also include the following functions:
    a. Assign initial value.
    b. Display complex number in proper format.
    c. Add and subtract a real number to complex number.
    d. Add and subtract an imaginary number from complex number.
    e. Write a main function to test your class and make sure to test all the member functions. Use manually driven input from the user for the same.
5. WAP to implement the following types of constructors in a class -
    a. No-argument constructor.
    b. One-argument constructor.
    c. Two-argument constructor.
    d. Copy constructor.
    e. Dynamic constructor.
6. WAP to implement Multilevel Inheritance.
7. WAP to implement Multiple Inheritance.
8. WAP to implement Hybrid Inheritance.
9. WAP to implement Polymorphism using virtual function.
10. WAP to implement Operator Overloading using member function and friend function.
11. WAP to implement Exception Handling.
12. WAP to demonstrate the use of STL (Standard Template Library) in C++.