**List of Lab programs QB**

1. Write a C++ program, using **common friend function, the function is called by reference** to exchange the private data members of two classes, display the data before exchange and after exchange.
2. Write a C++ program, to perform addition of two complex numbers, use default and parameterized constructor and display the both complex numbers and sum of two complex numbers. (e.g. 2+3j)
3. Write a C++ program, to demonstrate **unary minus operator is overloaded.**
4. Create a base class Student which reads and displays roll\_no of the student. Derive a class test from student class which reads and prints two subject marks, now derive one more class result which inherits the marks from test class of the student, find total marks and display the sum. Use appropriate type of inheritance to implement above program.
5. Create a class Student which reads and displays roll\_no of the student. Create another class class test which reads and prints two subject marks, now create one more class sportsmark which reads and prints sports marks of the student, derive a single class result from all above mentioned classes to find total marks of the student and display it. Use appropriate type of inheritance to implement above program.
6. Write a C++ program to create a base class geofig with member function getdata() to accept the sides of the geofig and display() function. Make the display () virtual. Define two derived class called rect and tri with member function display() to compute the respective area and display the sides and area. Make an interactive program to accept the appropriate dimension for the chosen figure.
7. Write a C++ program, to implement stack using array for following operations.
   1. Create list b. search for a key data and display appropriate messages c. display
8. Write a C++ program, to convert the given infix expression to postfix expression.
9. Write a C++ program, to implement stack using array basic operations.
10. Write a C++ program, to evaluate a valid postfix expression and display the result.
11. Write a C++ program, to implement linear queue operations using array.
12. Write a C++ program, to implement circular queue operations using array.
13. Write a C++ program, that reads a list of integers from the user, and search for a particular key in the created list if search is successful then delete it and update the rest list and display the list contents using Singly Linked List.
14. Write a C++ program, to create an array of suitable elements, read data from the user and search for a key element in the array and print appropriate messages.
15. Write a C++ program, to create an array of ordered elements, read data from the user and search for a key element in the array and print appropriate messages. Apply binary search method.
16. Write a C++ program, to arrange the given ‘n’ number of elements in ascending order using selection sort technique. (Read the data from the user)