## Lab\_ Exercises set 10

- Q1. Write a program to create a class that represents Complex numbers containing real and imaginary parts and then use it to perform complex number addition, subtraction, multiplication as well as complex conjugate.
- Q2. Write a program to create a class that can calculate the surface area and volume of a solid. The class should also have a provision to accept the data relevant to the solid.
- Q3. Write a program to create a class that can calculate the perimeter / circumference and area of a regular shape. The class should also have a provision to accept the data relevant to the shape.
- Q4. If a class D is derived from two base classes B1 and B2, then write these classes each containing a constructor. Ensure that while building an object of type D, constructor of B2 should get called. Also provide a destructor in each class. In what order would these destructors get called?
- Q5. Suppose there is a base class B and a derived class D derived from B. B has two public member functions b1() and b2(), whereas D has two member functions d1() and d2(). Write these classes for the following different situations:  $\Box$  b1() should be accessible from main module, b2() should not be.  $\Box$  Neither b1(), nor b2() should be accessible from main module.  $\Box$  Both b1() and b2() should be accessible from main module.