

### Practise TASK - 3

1. Write a program to create a class Student with data members name, roll\_no, and marks. Include member functions to input and display the details of the student. Create and display the details of at least three students.
2. Write a program to create a class Rectangle with data members length and width. Include member functions to calculate and display the area and perimeter of the rectangle. Create objects to find and display the area and perimeter of different rectangles.
3. Write a program to create a class BankAccount with data members account\_number, account\_holder\_name, and balance. Include member functions to perform deposit and withdrawal operations and to display account details. Create an object and perform various operations on it.
4. Write a program to create a class Complex to represent complex numbers. Include member functions to add, subtract, and multiply two complex numbers. Create objects to perform these operations and display the results.
5. Write a program to create a class Circle with a data member radius. Include an inline member function to calculate and return the area of the circle. Create an object to find and display the area of the circle.
6. Write a C++ program to create a class called Triangle that has private member variables for the lengths of its three sides. Implement member functions to determine if the triangle is equilateral, isosceles, or scalene.
7. Write a C++ program to implement a class called Date that has private member variables for day, month, and year. Include member functions to set and get these variables, as well as to validate if the date is valid and print proper message if date is invalid.
8. Write a program to create a class Volume with overloaded functions to calculate the volume of a cube, a sphere, and a cylinder. Create objects to demonstrate the use of overloaded functions.
9. Write a program to create a class Area with functions to calculate the area of a circle, square, rectangle, and triangle. Create objects to demonstrate function overloading.