Practical – 4

1. Create a class named Date having three instance variables named Day, Month and Year also has two set_date() to catch values of instance variables and get_date() to display caught values on the output screen. And create another class DateDemo containing main() method.
2. Create a class named Box to find volume of box using method. Box class having instance variables named length, width and height must be filled by initialization and get their value from keyboard.
3. Create a Class named Equation having following methods which finds roots quadratic equation:
   a) Get_info() :- to set instance variable values.
   b) Real():- to evaluate real roots values
   c) Equal_values():- to evaluate equal values.
   d) Imaginary():- to calculate imaginary root i.e not possible roots.

   Create an another class Quadratic residing main() methods which contains finds Delta values and according to result call the appropriate method in Equation Class.
4. Create a class Student having instance variables rollno, age, height, weight and contact for student and also has two methods set_info() and get_info() to set and get instance variable values respectively. A main() method resides in student_info class which sets and gets info for 5 students. Use parameterized constructor to initialize instance variable values.
5. Create a class Exam having stu_name, rollno, sub_code, sub_name, InternalMarks and ExternalMarks also contains two methods Calculate_result() and Show_result(). Students having marks to be shown in ouput with his name and roll_no. A main() method is contained by Exam_demo class. Use parameterized constructor with local variable named as instance variables which hides them.

   Note: Use your additional variables as per your needs.
6. Write a program to find interest of an amount given by a bank. This program code uses function overloading to find interest having two different forms. The first form accepts amount and percentage of interest and the second form accepts amount and percentage two values as parameters additionally with number of year as a parameter.
7. Write a program to find area of different shapes using function overloading like as

rectangle, triangle, sphere passing different arguments to overloaded method Area().

8. Write a Java program to using function overloading method to read set of integers and floating point numbers separately and to store it in the corresponding arrays. Again read a number from the keyboard and check whether the number ‘d’ is present in the arrays. If it is so, print out how many times the number ‘d’ is repeated in the array.