Practical-6

1. Write an application that defines a circle class with two constructors. The first form accepts double values as a radius of the circle. This constructor assumes that the circle is centered at the origin. The second form accepts one double value for radius and two integer values for coordinates of the center.

   Note:- output should be in the following formats.

   X^2+Y^2=r^2 (for circle centered at origin with r radius)

   (X-X1)^2+(Y-Y1)^2=r^2 (for circle centered at (x1,y1) location with r radius)

2. 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 percantage two values as parameters additionally with number of year as a parameter.
3. Write a program to find area of different shapes using function overloading like as rectangle, triangle, sphere passing different arguments to overloaded method Area().
4. 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.
5. Create a class Home which has instance variables likes typeofhome, colour, rooms and NoOfStoreis. Using constructor overloading find which two out of four homes are similar. A SampleHome class contains main() method and it also creates four homes of Home class.

   Note:- Use constructor as a parameter in a method.