# **SSN COLLEGE OF ENGINEERING, KALAVAKKAM**

**DEPARTMENT** **OF COMPUTER SCIENCE AND ENGINEERING**

##### B.E. (CSE) V SEMESTER

##### CS6501 - Internet Programming

**Date: 02.08.2016, 09.08.2016**

**Tutorial Problems - Unit – I**

1. Create class called Person with name, address, mobileno and email. Create a class called AccountHolder with account number, typeofaccount (can be SB or CA), amount, interest. Create classes called SBI, ICCI and Axis with the data members, namely, int\_rate\_SB (to describe interest rate for SB account) and int\_rate\_CA (to describe interest rate for CA account). Write appropriate methods to read and display the data members. Define and declare methods appropriately to calculate the interest for the amount deposited and store it in the interest data member. Write a program in Java to implement runtime polymorphism.
2. Write a program in java Applet to realize the life cycle methods of it.
3. Write a program in java Applet to draw a rectangle filled with red color with a text centered in it.
4. Write a program in java Applet for bouncing the ball.
5. Write a program to create thread to display the text “Thread Running....” using both the Thread class and Runnable interface.
6. Write a program to create two threads. One thread prints the numbers from 1 to 5. Another thread prints the strings “Hi”, Hello”, “Welcome”, “How are you?” and “I am fine”.
7. Write a program to create three threads. Each thread is responsible for updating the common one dimensional array. Thread1 is responsible for incrementing the value of the array by 1. Thread2 is responsible for incrementing the value of the array by 2. Thread3 is responsible for incrementing the value of the array by 3. Use synchronized method to update. While it is updating print the updated vale along with the Thread name.
8. Write a program to implement Producer – Consumer for producing and accessing an integer value. Create a class Q to keep the integer value to simulate the contents of Q. Further, keep a Boolean variable to indicate that whether the value has been consumed or produced. Simulate Producer – Consumer problem by creating the two threads by using synchronized method, wait() and notify() methods.