**MultiThreading**

**Exercise 1:***Create a class with 4 threads and display a table structured output with the following details*

*every 100 secs 5 times.*

1. *The Id of the thread*
2. *The name of the thread*
3. *Whether the thread is alive or not*
4. *The status of the thread*
5. *The priority level of the thread*

**Exercise 2 :***Write a program that picks up a question from an array containing 10 elements and displays the question. It then waits 30 seconds for the user to answer. If user answers it correctly, then it moves to the next question, otherwise it terminates the program.*

**Exercise 3:***Write a class called Clock with three methods Tick ,Tack and Tock each displaying tick,tack and tock as messages respectively.The outputshould be as follows:*

*Tick1 Tack1 Tock 1*

*Tick2 Tack2 Tock 2*

*Tick3 Tack3 Tock 3*

*The output goes on till 60.*

**Exercise 4:***Write an application to simulate the vehicles crossing a bridge and a toll plaza on a highway.*

*For the purpose of this exercise, simulate the environment for five vehicles that are*

*approaching the bridge and the toll booth. The vehicles are numbered from one to five. The*

*vehicles should approach the bridge and the toll booth in sequential order. The toll booth can*

*only deal with one vehicle at a time. This application should print a message every time when*

*a vehicle crosses the bridge and another message when a vehicle crosses the toll booth along*

*with the vehicle number.*

**Exercise 5:***Consider the following scenario. Whenever a hen lays an egg its owner sells the egg to a shop. In the last 4 months the owner has gained Rs. 100 by selling eggs in the rate of Rs.2 per egg.*

*Display the following messages*

*Hen Laid the Egg – 1*

*Owner gained Rs 2*

*Hen Laid the Egg – 2*

*Owner gained Rs 4*

*…*

*…*

*…*

*…. So on.*