**Velammal College of Engineering and Technology, Madurai**

**An Autonomous Institution**

**Department of Computer Science and Engineering**

**21CS205 Object oriented programming lab**

**Exercise No 8**

**MultiThreading**

Team 1

1. Write a program TestThreadMany.java that takes a positive integer n from the command line and creates exactly n threads that print out their own name. Here is a sample execution:

**$ javaTestThreadMany 4**

**Hello, I am Thread #1**

**Hello, I am Thread #2**

**Hello, I am Thread #3**

**Hello, I am Thread #4**

1. Write a java program that implements inter-thread communication and suspending, resuming and stopping thread.

Team 2

1. Write a Java program to print sequence number in 3 thread

Eg Thread 1 Thread2 Thread3

1 2 3

4 5 6

7 8 9

1. Write a java program that implements inter-thread communication for producer-consumer pattern.

Team 3

1. Write a Java program ‘WordCount’ that counts the words in one or more files. Start a new thread for each file. For example, if you call “java WordCount report.txt address.txt Homework.java “then the program might print

address.txt: 1052

Homework.java: 445

report.txt: 2099

1. Write a java program that implements Queue ADT using Multithreading and synchronization.

Team 4

1. Write a Java program that implements multithreading concepts. Create the application with 3 threads. First thread creates random number. If the value is even then second thread computes square of that number and display it. If the generated random value is odd the third thread prints the value of cube of that number.
2. Write a java program that implements stack ADT using Multithreading and synchronization.

Team 5

1. Write a java program for generating three threads to perform the following operations
2. Getting N numbers as input
3. Printing the numbers divisible by five
4. Computing the average.
5. Write a java program that implements inter-thread communication for banking application

Team 6

1. Write a Java program ‘WordCount’ that counts the words in one or more files. Start a new thread for each file. For example, if you call “java WordCount report.txt address.txt Homework.java “then the program might print

address.txt: 1052

Homework.java: 445

report.txt: 2099

1. Write a java program that implements inter-thread communication and suspending, resuming and stopping thread.

Team 7

1. Write a java program that implements a multi-threaded application that has three threads. First thread generates a random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.
2. Write a java program that implements inter-thread communication for producer-consumer pattern.

Team 8

1. Write a java program that implements a Bus Reservation System using multithreading.

Create n no of customer to reserve and cancel seat.

1. Write a java program that implements inter-thread communication for producer-consumer pattern.