

Roll No.  
Name of the Student:  
Batch:  
Date of Submission:

## **ASSIGNMENT NO: 7**

### **Aim**

Multithreading using Thread Class and Runnable Interface

### **Problem Statement 1**

Write a program to create a multithreaded calculator that does addition, subtraction, multiplication, and division using separate threads.

Additionally also handle '/' by zero' exception by the division method.

### **Problem Statement 2**

Print even and odd numbers in increasing order using two threads in Java

### **Objectives:**

1. To understand Multithreading in Java
2. To learn two different ways to create threads in Java.

### **Theory:**

Explain following concepts with their syntax and appropriate example in Java

- Multithreading in Java
- Life Cycle of a Thread
- Two ways to create a Thread
- How to perform multiple tasks by multiple threads
- Thread Scheduler
- Joining a thread

### **Platform:**

- Windows / 64-bit Open source Linux or its derivatives.
- Eclipse IDE with Java

**Input:**

Students should write input provided

**Output:**

Students should write output obtained

**Conclusion:**

Thus, learnt the use of thread class in java and performed multithreading operations.

**FAQs:**

1. Why do we use collection framework?
2. Which is best collection framework in Java?
3. What is difference between array and collection?
4. What is HashMap in Java?

**\*Attach copy of Implemented Java Code along with output.**