Live Session: Multithreading and Data I/0(Total length: 2 hours)

Welcome to the live session on ‘Java-Fundamentals’. The live session length will be 2 hours.

In this session,

the SME will be covering some of the basic concepts of Java.

This session will be mixed of Java and hands-on coding session and will be covering the

following topics

in the agenda

● JDK, JRE, and JVM

● IDE setup with above embedded along with Git

Note for the SME:

● Code by sharing the screen and asking learners to code alongside. Throughout the

session please do constantly follow up with the learner’s progress and make sure

everyone is following.

● Before running the code on a sample test case, ask the learners about their outputs.

The code demos will be within IDE on a local machine.

● Please make sure to test run your codes/queries prior to the session to avoid any

hick-up during the session.

● For each coding question practice using multiple approaches to help student reach to

optimal solution through each approach.

Part 1:Data I/0(40 minutes)

* What is data I/0
* What are data input and output streams in java
* How to read data from console using input streams
* Reading and writing data from JSON file
* Reading and writing data from XML file

Break: 5 minutes

Part 2: Multithreading(1 hour 15 minutes)

* Threads vs processes
* Thread class with example
* Runnable interface with example
* Lifecycle of a thread
* Sleep ,Join, yield ,setPriority and ge Priority methods with examples
* Synchronisation
* Deadlocks with example