# **Thread Class Extension - Assignment**

## **Objective**

In this assignment, you will explore the fundamentals of multithreading in Java by extending the Thread class. You will complete a Java program that demonstrates the creation and execution of multiple threads by subclassing Thread.

### **Project Setup**

Your project structure includes the following:

- A Java class named ThreadExample which contains a main method.
- The main method is responsible for creating and starting multiple threads.
- A custom class named MyThread that extends the Thread class and overrides the run() method.

#### **Tasks to Complete**

You will be provided with a skeleton Java class (ThreadExample.java) with missing implementation for the main method and MyThread class. Your task is to complete the following:

- 1. Create and implement the MyThread class:
- The class should extend the Thread class.
- Override the run() method to print a message showing the name of the current thread as "<thread name> is running."
- 2. Inside the main method:
- Create at least two instances of MyThread as "thread1" and "thread2".
- Start both threads to demonstrate concurrent execution.
- Each thread should output its own message to the console independently.

### **Execution Steps to Follow:**

- 1. All actions like build, compile, running application, running test cases will be through Command Terminal.
- 2. To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) 

  Terminal 

  New Terminal.
- 3. This editor Auto Saves the code.
- 4. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
- 5. To run your project use command:

```
sudo JAVA_HOME=$JAVA_HOME /usr/share/maven/bin/mvn compile exec:java -Dexec.mainClass="com.yaksha.assignment.Main"
```

\*If it asks for the password, provide password : pass@word1

6. To test your project test cases, use the command

sudo JAVA\_HOME=\$JAVA\_HOME /usr/share/maven/bin/mvn test

\*If it asks for the password, provide password : pass@word1