Note:

1. Students will write the JAVA code for the following programming assignments and will execute through Command Prompt or Intellij IDEA IDE.

2. After successful execution, all the executed code and output needs to combine in a single PDF file to submit.

3. Submit the pdf file on Moodle link:

Problem Statements:

WAP to Assign different priorities to the 2 threads and observe the behaviour.

WAP to create a producer-consumer scenario using the wait () and notify () methods for thread synchronization.

WAP to implement deadlock in Java (Content Beyond Syllabus).

WAP to implement the following new features in Java.

(a) Functional Interface

(b) Lambda Expression: Write a Java program to implement a lambda expression to check if a given string is empty.

(c) Method References:

(d) Default and Static Method in Interface

(e) Inner Class

WAP to implement different types of Annotations in JAVA.

WAP to filter data by using streams.

WAP to Traversing the array elements and to sum the elements using For-each loop.

WAP to implement Base64 Encoding and Decoding.

WAP to implement Local Variable Type Inference.

WAP to implement Sealed Class.

WAP to insert an element into the array list at the first position.

WAP to iterate a linked list in reverse order.

WAP to append the specified element to the end of a hash set.

WAP to add all the elements of a specified to another tree set. tree set.

WAP to count the number of key-value (size) mappings in a map.

WAP to search for a value in a Tree Map.

WAP to Demonstrate Iterator

WAP to create industry-oriented applications using Spring Framework.

WAP to test RESTful web services using Spring Boot.

WAP to test Frontend web application with Spring Boot