## **ASSIGNMENT (EC-1)**

As part of the Assignment component under EC-1 for the Distributed Computing course, the following programming assignment is to be completed. The completed assignment should be submitted to the elearn portal under the **Assignment (EC-1) section (below the Quiz component)** in the course page. The submissions are allowed from 16<sup>th</sup> October 2021. The deadline for the submission is 3<sup>rd</sup> November 2021.

As per the handout, the total weightage for this evaluation component is 10%. The assignment consists of one programming problem. Below is given the problem statement of the assignment. For submission, you have to adhere to the following instructions:

- Put the source file(s) and a README file in one folder.
- Create a zipped folder containing the solution and submit the final zipped folder to the elearn portal.
- The README file should contain the relevant information required for compiling and executing code(s) for evaluation as well as any platform related dependency (like what operating system is required for execution). The README file should also contain the format of the input to be given to the program and any assumptions that you have made. It is mandatory to include the README file in your submission.

The assignment is based on the concepts and algorithm included in the syllabus. The syllabus for this lab component includes topics included in modules 1 to 6 (upto **Distributed Mutual Exclusion**). **The program is to be implemented in C/C++/Java/Python/C#/Ruby/Javascript**. Any other programming language other than C, C++, Java, Python, C#, Ruby, Javascript will not be considered.

## **ASSIGNMENT PROBLEM STATEMENT**

1. Write a program to implement the Ricart-Agrawala algorithm for implementing distributed mutual exclusion. Assume the communication channels to be FIFO in nature. [10%]

Note - No requests for deadline extension will be entertained under any circumstances. No resubmissions beyond the mentioned deadline will be allowed in case the student later finds out that wrong files were submitted or the submission was faulty. If source files are not submitted, no marks will be awarded.