

CS5320: Distributed Computing Project

Read Me

The following items are enclosed in the zip file -

1. ProjectSrc-cs16mtech11006_11009_Algo1.cpp
2. ProjectSrc-cs16mtech11006_11009_Algo2.cpp
3. ProjectSrc-plotGraph.py
4. ProjectSrc_scriptExec.sh
5. Input/in-params*.txt
6. Input/topology*.txt
7. Output/outputAlgorithm[1|2].txt
8. logs/logFile_2.txt
9. Project Report

Steps -

1. `chmod +x ProjectSrc_scriptExec.sh` // Changing permission of the script
2. `./ProjectSrc_scriptExec.sh 10 1` // Execute the script
// Param-1 – To execute for Max 10 nodes starting from 5 nodes.
// Param-2 – Whether to compile the source codes.

Output -

Two .png files namely, *ControlMsgComplexity.png* and *ResponseTimeComplexity.png* containing the comparison graphs of the two algorithms.

Functionality of the Files -

1. *Source Codes* for the two algorithms namely,
ProjectSrc-cs16mtech11006_11009_Algo1.cpp
ProjectSrc-cs16mtech11006_11009_Algo2.cpp
2. *Python script* to generate graph.
ProjectSrc-plotGraph.py
3. *Shell script* to execute the code for different no. of nodes over multiple iterations.
ProjectSrc_scriptExec.sh
4. *Input Folder* – Contains all the input parameters and topology files for different no. of nodes.
e.g . *in-params7.txt* and *topology7.txt* indicates the configuration files for 7-nodes.
5. *Logs Folder* – Contains all the log-file of different nodes. In distributed systems, this folder will have only one log file namely, *logFile_2.txt*.
6. *Output Folder* – Contains the results of the algorithms over different iterations and different topologies. It is maintained in two output files '*outputAlgorithm1.txt*' and '*outputAlgorithm2.txt*'. These files are used by 'ProjectSrc-plotGraph.py' to generate graphs.

System Specifications -

- Ubuntu 16.04 32 bit.
- g++ compiler.