Distributed Algorithms Programming Hw 1

Question 1 (33 pts): Please implement Flood_ST algorithm (Algorithm 4.2 in page 41 of the course book) on our asynchronous thread simulator.

Question 2 (33 pts). Please implement Tarry_ST algorithm (Algorithm 4.4 in page 46 of the course book) on our asynchronous thread simulator.

Question 3 (34 pts). In this question you will measure the message count, runtime performance and diameter of the trees of Flood_ST algorithm and Tarry_ST algorithm against varying node counts. Please generate random graphs with 20 nodes, 40 nodes, 60 nodes and 80 nodes. Measure total message count (total messages sent), runtime and diameter of the resulting trees for each setup. Plot 3 graphs and provide necessary comments by comparing these two algorithms.

Please provide a report related to homework. In your report, please explain your solution with necessary screenshots of your programs.

Deadline: 27.December.2014, 23:59

Submission: Please send your homework (report and source codes) to these e-mails:

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