

Advanced Distributed Algorithms and Data Structures

WS 2016

Homework Assignment 6

Problem 1:

- a) Prove Claim 6.2 on slide 45.
- b) Prove the exercise on slide 19 of Chapter 7.

Problem 2:

Implement and test the median rule on slide 21 of Chapter 7 using a simple, sequential simulation:

The values of the nodes at the beginning of a round are stored in an array A of size n . During that round, we determine via random experiments, which of the nodes are contacted by each node, and based on that, the followup value of a node.

The task is to observe, for different values of n and input values, how quickly the median rule converges to a single value.