Exercise Session 10 View Synchronous Communication

December 13, 2010

Problem 1

Use the idea of the transformation from (1, N) regular to (1, 1) atomic registers (Algorithm 4.3) to adapt the "Read-One Write-All" algorithm (Algorithm 4.1 in the book) to implement a (1, 1) Atomic Register.

Look at the solution to Exercise 4.3 from the new book.

Problem 2

Give an algorithm that implements a (1,1) atomic register in the fail-silent model and that is more efficient than the "Read-Impose Write-Majority" algorithm (Algorithm 4.64.7 in the book implements a (1,N) atomic register in the fail-silent model).

Look at the solution to Exercise 4.7 from the new book.