

Exercise Session 8

Shared Memory

Problem 1

Explain why every process needs to maintain a copy of the register value in the “Majority Voting” algorithm (Either Algorithm 4.2 in the book, or ABD95 algorithm from slides).

Problem 2

Consider a system with two processes p_1 and p_2 . Give a register execution such that each process performs exactly two operations and the execution is

1. not safe
2. not regular but safe
3. not atomic but regular