Algorithm – Leader Election

Algorithm 1 Monarchical Leader Election

Implements:

LeaderElection, instance le.

Uses:

PerfectFailureDetector, instance P.

1: upon event ⟨ Init ⟩ do
2:   suspected := ∅
3:   leader := ⊥
4: upon event ⟨ P, Crash | p ⟩ do
5:   suspected := suspected ∪ {p}
6: upon event ⟨ leader ≠ MAXRANK(Π \ suspected) ⟩ do
7:   leader := MAXRANK(Π \ suspected)
8: trigger ⟨ le, Leader | leader ⟩