

Exercise 8

Problem 1. Devise an obstruction-free, anonymous algorithm that implements binary consensus using a *finite* number of (unbounded) counters.

Reminder: a counter object implements two operations: *inc*, which increments the value of the counter and returns *ok*, and *read*, which returns the current value of the counter.

Problem 2. According to the implementation of anonymous snapshot given in the lecture, if we place

“If some $\text{Reg}[j]$ contains a collect with a higher timestamp than ts , then return that collect”

by the following

“If some $\text{Reg}[j]$ contains a collect with a timestamp *no less than* ts , then return that collect”,

is the implementation still correct? Justify your answer.