Sample Solutions

CS 247: Principles of Distributed Computing
Spring 2020

1.

Execute the code for upon crash in the upon periodic.

2.

Wait for a majority, at least one is correct and will kickstart the process.

3.

Any execution where a crashed process violates causality can continue so that the process does not crash. Because causality is a safety property and the algorithm does not know when processes crash, it has to preserve it for any process.

4.

If that process is in the intersection of two majorities for a write and then a read.

6.

The leader can skip collecting values from the processes as no value is previously installed. The processes can then decide in three rounds.