Homework 1

- Consider a system in which processes **cannot** fail.

  Straightforward to solve consensus:

  - collect the processes into a group
  - each process reliably multicast its proposed value to the group
  - each process waits until it has collected all N values (including its own)
  - it then evaluates the function majority(v_1, v_2, ..., v_N), which returns:
    - the value that occurs most often among its arguments or
    - the special value $\perp \notin D$ if no majority exists.

Prove that the previous algorithm for consensus does not work in presence of process failures.

Homework 2

- [Linking Problems: BG from C] Show how it is possible to construct a solution to the Byzantine Generals (BG) problem from the Consensus (C) problem.