

# What is Consensus?

Formal problem statement

- $N$  processes

- Each process  $p$  has

  - input variable  $x_p$  : initially either 0 or 1

  - output variable  $y_p$  : initially  $b$  (can be changed only once)

- **Consensus problem**: design a protocol so that at the end, either:

1. All processes set their output variables to 0 (all-0's)

2. Or All processes set their output variables to 1 (all-1's)