Sequencer-based Approach

- Special process elected as leader or sequencer
- Send multicast at process P*i*:
  - Send multicast message M to group and sequencer
- Sequencer:
  - Maintains a global sequence number S (initially 0)
  - When it receives a multicast message M, it sets S = S + 1, and multicasts <M, S>
- Receive multicast at process P*i*:
  - P*i* maintains a local received global sequence number S*i* (initially 0)
  - If P*i* receives a multicast M from P*j*, it buffers it until it both
    1. P*i* receives <M, S(M)> from sequencer, and
    2. S*i* + 1 = S(M)
    - Then deliver it message to application and set S*i* = S*i* + 1