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Exercise for the lecture
Distributed Systems
Summer 2013

Sheet 3

EXERCISE 3:

1. Multicast communication

   You are running set of n processes.

   - What is the difference between basic multicast and IP multicast?
   - Describe an algorithm that implements basic multicast over IP multicast!
   - Can a single Byzantine process disrupt your algorithm? Describe how it can be disrupted or why it is impossible to disrupt your algorithm!
   - What if instead the channel has Byzantine failures?
   - If a network is not completely connected has this influence to the limit $3f < n$ of the maximum amount of byzantine processes f to influence a concencsus?

2. Implementing Multicast

   Have a look at the provided Java project. There are several comments starting with **TODO**. Finish the project / get all the **TODO**s done!