- 1. Depending on how specific the time stamp was: if it included the date, then yes, if simply a time, then no.
- 2. The vector clock method is easier and more efficient to use since it uses ints versus a time stamp object, which would inevitably be larger and harder to compare one with an another. The advantage of a time stamp id would be that we could order all of the messages relative to the time they were sent, rather than received.
- 3.No, because they are in the order that they were received and since the gossip protocol, while supporting complete dissemination of data, does not guarantee that we get that data in the same order that it was generated.
- 4. By sending messages in a strict sequence and by saving the states of the local node as well as peers, we are able to guarantee that we do not send the same message to the same node over and over again. Again by updating the state of the node that i sent a rumor to, there is no way that I can send that same node the same message again, though other nodes could possible send the same rumor to that node, but again only once.
- 5.uuid's are (practically) universally unique no matter the system. If i were to use a long random number, I would need a central authority to make sure that the long random number, though unlikely if generated separately, were somehow the same. UUIDS allow us to be more confidently distributed than long random numbers.
- 6. the higher sleep time would result in a less energy consumption/lower cpu usage, but the messages would be propagated much slower than with a lower sleep time. In fact this latency would be more than the difference in sleep times, it would be more like the difference times the number of nodes in the system + the time it takes to randomly send the appropriate want or rumor message.