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### Project 1 Discussion Questions

1. Pros of event-driven programming is that it is listening for a specific trigger to start the rest of the code and queue them up in the process. They are also modular by nature as the code is split into events giving them access to upgrade the code later or used in other events. Some cons is that it takes more resources as each event are put into a queue when processed and sometimes event collision can happen during receiving event requests.
2. The benefits of having a flooding check and TTL is that the flooding checks for immortal packages and will delete them from the network while TTL is responsible for how long the package stays in the network before deleting itself. If we only have a flooding protocol, we wouldn't know the time it takes from the destination to the source. If we only have TTL checks then the immortal packages that don't decrease in TTL can persist in the network making it congested.
3. The total number of packets sent and received would equal to the amount of nodes that exist within the network they are trying to receive. The worst case scenario would be TTL times the amount of nodes as it can't find their destination.
4. Each node that receives the node but not the destination can decrease the TTL of the package and send it back out again to see if some nodes can deliver it to the right destination.
5. One of the pros of the code is that it would use protocol to see that if the packet is a neighbor discovery request to a neighbor acknowledge where they ping back to the destination if that is the neighbor. One of the cons is that there could be collision where there could be multiple neighbors sending back an acknowledgement packet therefore the event can take time to fill in the neighbor list.