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**Post Lab Report**

**Task1 Assumptions:**

1. Separate average values for all 3 nodes. The code is scalable up to 99 nodes and if we want to add more nodes just increase the SIZE variable in the code.
2. Packets arrived in sequence as observed no packet arrives out of order.

**Task1 Analysis:**

1. Packets reaches the server even when they are out of the green region of the server but in green region of some client node.
2. Before exchange of any packets first network topology is set by initializing the server as root and then by exchange of DIO and DAO packets information about parents and their children reaches the root node i.e. server

**Task 2 Assumptions:**

1. ‘/0’ shows the humidity value and its average only when 16 packets have reached the border router otherwise it will show average of 0 but show the correct value for the pressure

**Task2 Analysis:**

1. The node is reachable even when move from the green region of the border router because it is reachable via some other node which is in the green region of border-router or any other topology in which some node is adjacent to any node which is X hopes away but in the green region of node connected to the border gateway router.
2. ‘/’ shows the temperature and light values

**Post Lab Task Assumptions:**

1. ‘/0/ shows the temperature and light values
2. ‘/1’ shows the temperature chart
3. ‘/2’ shows the humidity chart
4. ‘/3’ will turn the LEDs on.
5. ‘/4’ will turn the LEDs off.
6. Humidity value of 116 is hardcoded since memory issue arises due to the limited rom size.

**Post Lab Task Analysis:**

1. Circular array is used due to the constant time insertion and retrieval. Otherwise it will add to the memory constraints.
2. Floating point and double precis

The code for task2 and post-lab task is same since we built up on the code of task2.