Post Lab Task Report

**Assumptions:**

1. Maximum source nodes are defined by a max size variable in the code.
2. Source nodes only perform sensing and broadcast the data.
3. Sink nodes only receive the data in a sequential order.
4. Sink node will raise alarm.
5. Some packets will be lost due to the asynchronous nature of packet arrival because if a high id packet arrives before a lower if packet that lower id packet will not contribute in the averaging measurements.
6. Nodes maintain information of packets which reach them so that they do not get forwarded.

**Energy Consumption:**

1. For smaller intervals energy consumption will be higher as sensors will send more readings.

**Network Traffic:**

1. For smaller sensing intervals network traffic will be more as we need to send packets earlier.

**Processing:**

1. For smaller sensing intervals more processing will be required as data is arriving earlier.

**Sensing Topology:**

1. Source nodes which are not in the green region of sink will broadcast data to the nodes which will eventually reach in the nodes which are in the green region of the sink node and the packets will eventually reach the sink node which will perform the pre-processing.

**Result**: Sensing interval of 10s is suitable in this scenario. Also a routing algorithm which will not broadcast but rather found a direct route by maybe an initial broadcast will be more suitable as the device is embedded.