Running Instructions

Instructions for Running the Python Scripts for each node

1. Open two terminals or command prompts.
2. Navigate to the directory where the Python scripts are located.
3. For each the Python script, run it using the following command:

   Terminal 1:

   ```
   python .\sender.py
   ```

   Terminal 2:

   ```
   python .\receiver.py
   ```

4. When prompted about the Device ID and Total Number of Devices in MAC Layer, enter the respective data at each node as you want to create the network.

   For example:
   Enter the device id: <Device ID (1, 2 or 3)>
   Enter the total number of devices: <Number of devices (here, 3)>

NOTE: Run both the files at each node, and all the files on all the nodes within a minute (for the cases other than 3 nodes). Else, in the case of 3 nodes, they will auto align their times.

For the Sender Side

1. You'll have to enter the data in a text file named `input.txt` in the same directory as the sender script. The structure of the message to be entered in the file is:

```
Line 01 :: <message> <space> <destination>
Line 02 :: DONE
```

   NOTE: The `DONE` text should be in all CAPS.

2. After entering the the message, **save** the file. The script detects the message and adds it to the queue of message to send and clears the file.

3. The script will then show the logsof data detected, the one being sent and indicate that the transmission is complete in the specified format.

For the Receiver Side

1. For the receiver side, there is no need to enter anything specifically.

2. The script will generate the terminal logs showing its status of recording from time to time. The logs of data detected, and also if any ambiguous data being detected in that slot.

NOTE: Since receiver utilizes multithreading, the results of logs will print with a delay. The multithreading is handled well and wouldn't result in missing of any data.