

## Lab Assignment 6

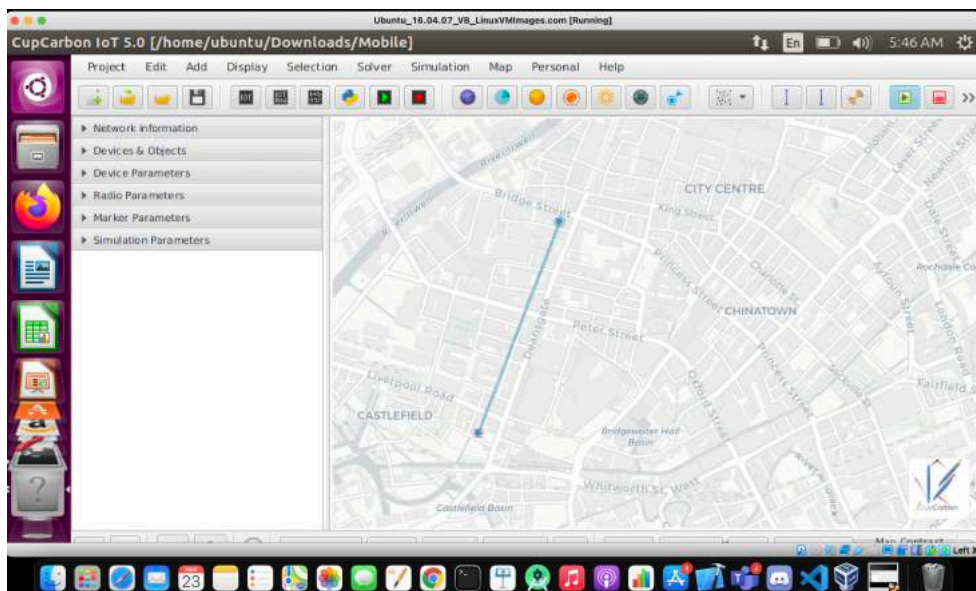
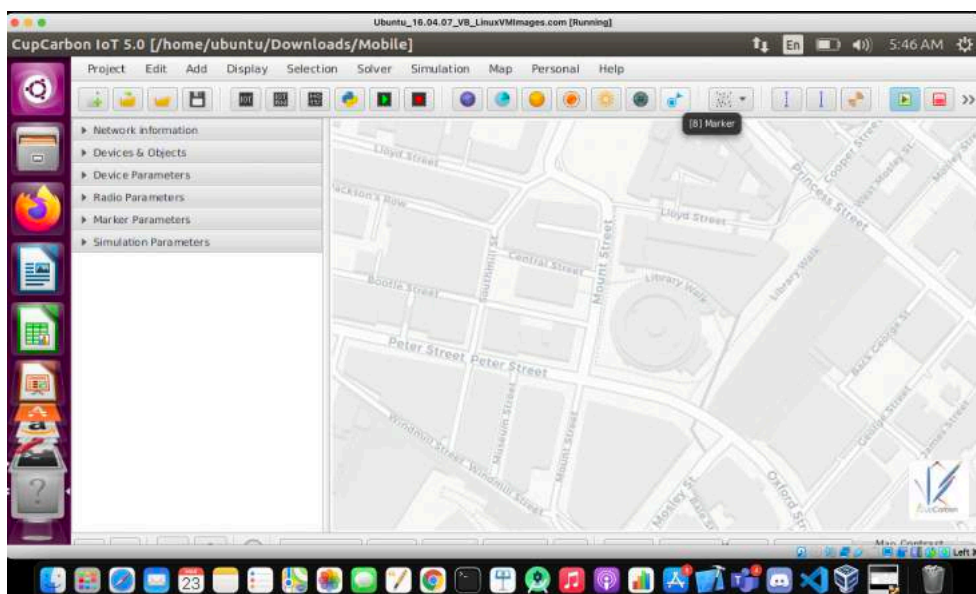
**Aim** : To implement mobility sensing using cupcarbon

**Theory** :

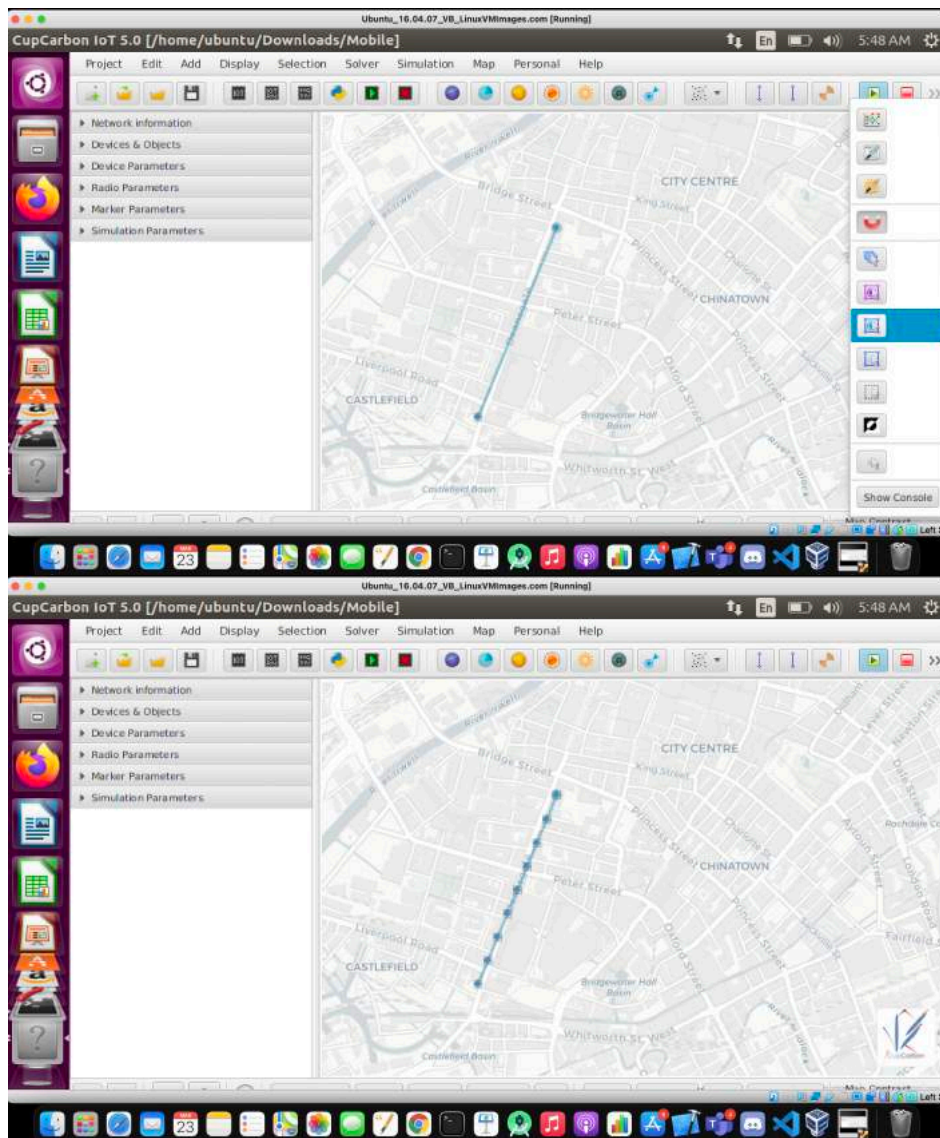
**Steps**:

### WITHOUT ROUTING

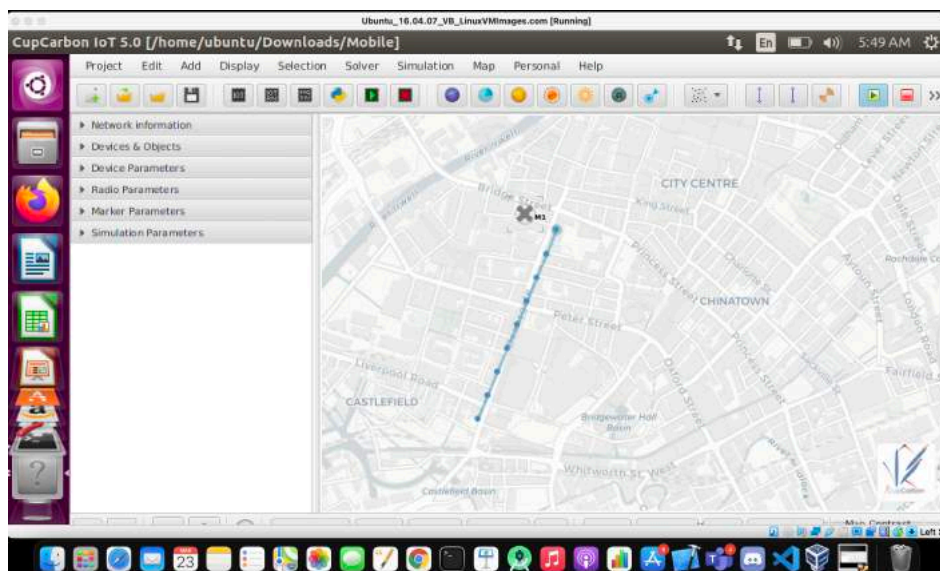
1. Add 2 markers nodes by selecting marker and two random points on the map.

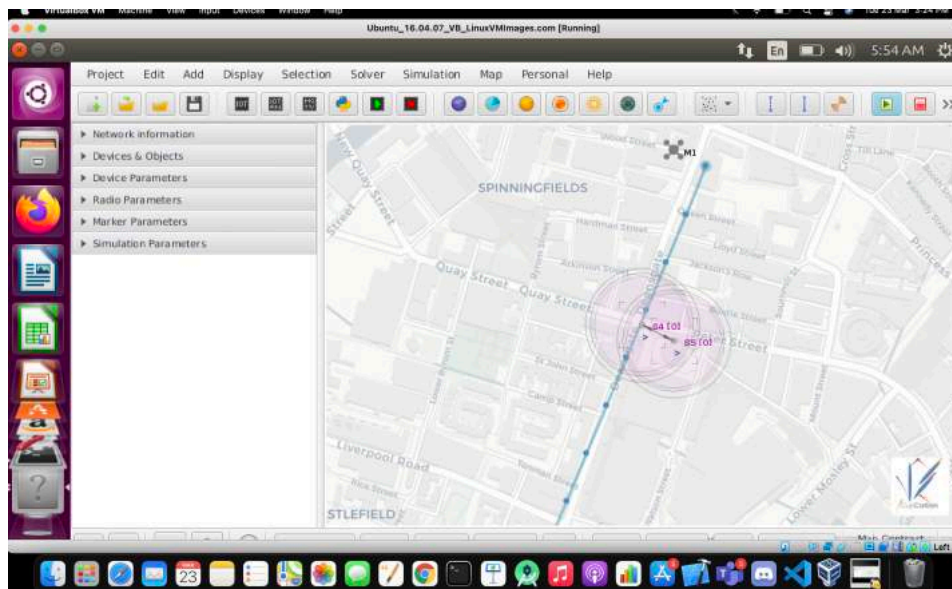


2. Then, select all these markers and press on the key 'u' to insert intermediate markers.

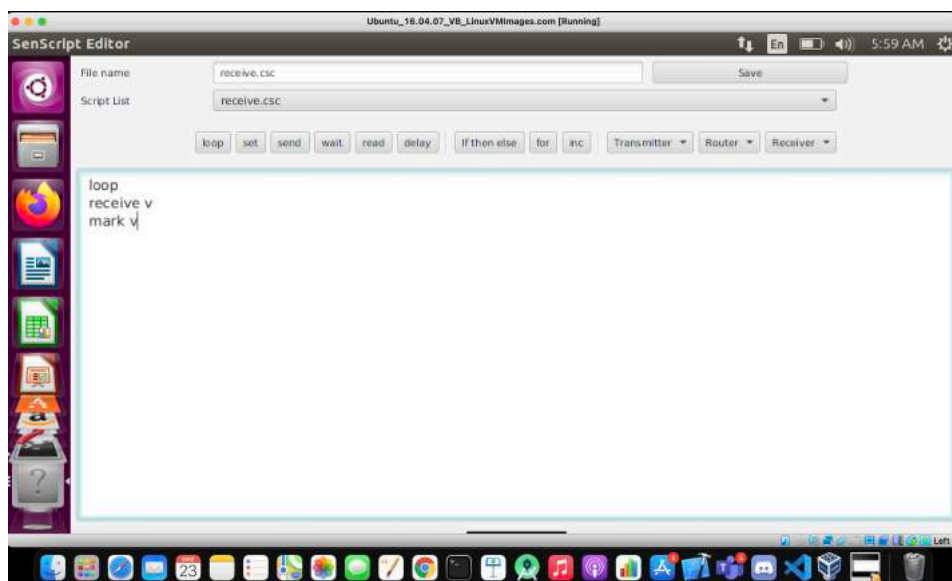
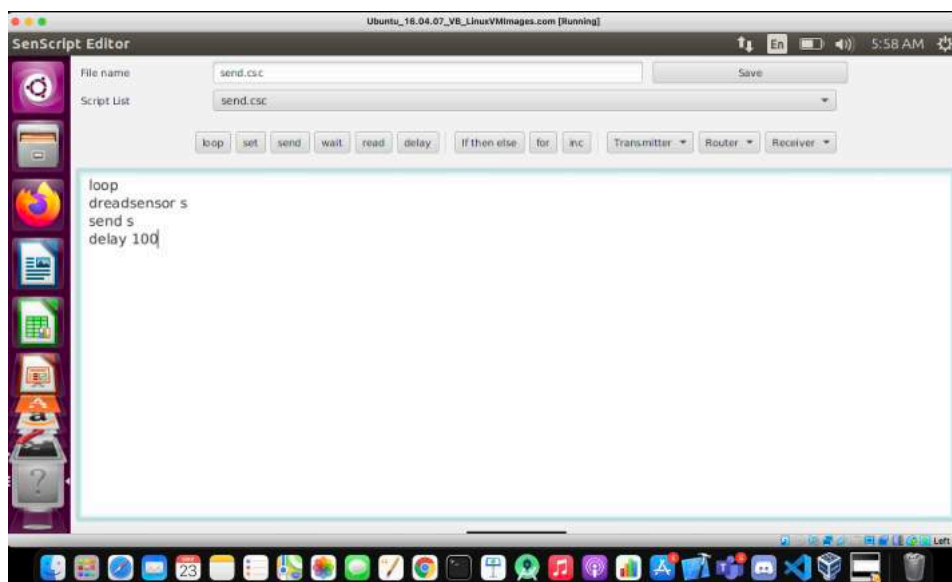


3. Add a Mobile node and 2 sensor nodes (Increase the area of the sender node by pressing the ')' key)

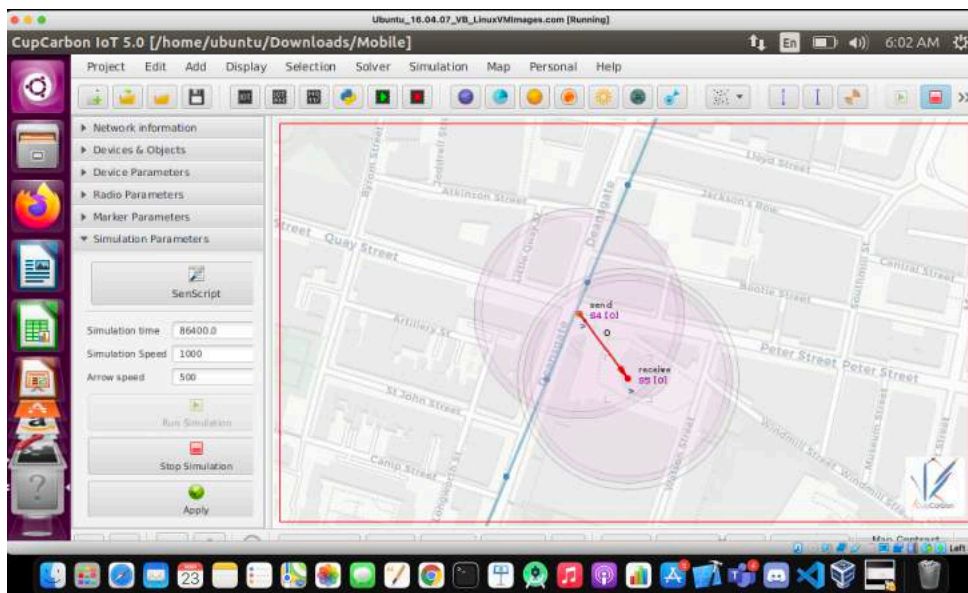




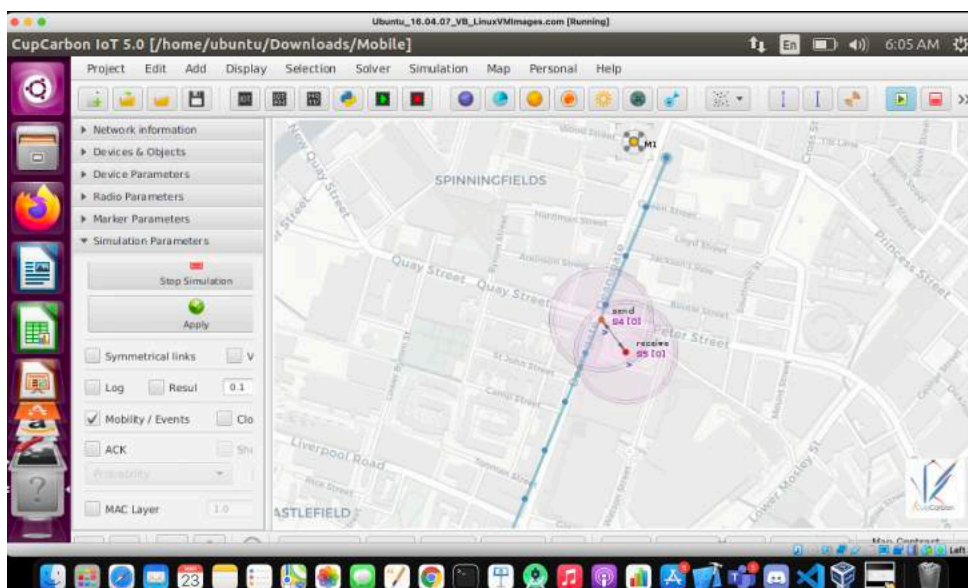
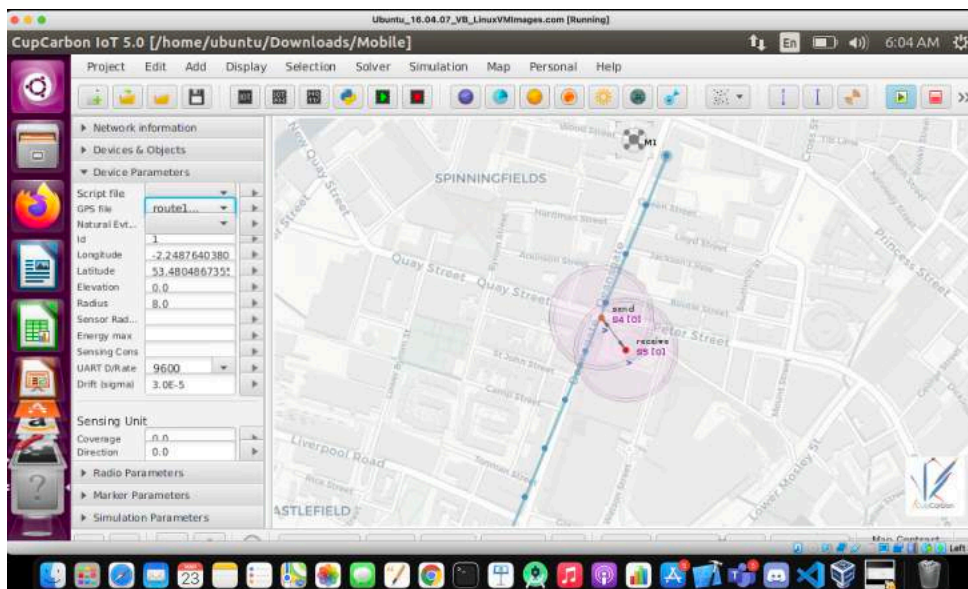
4. Add the following scripts to the sender and receiver nodes :



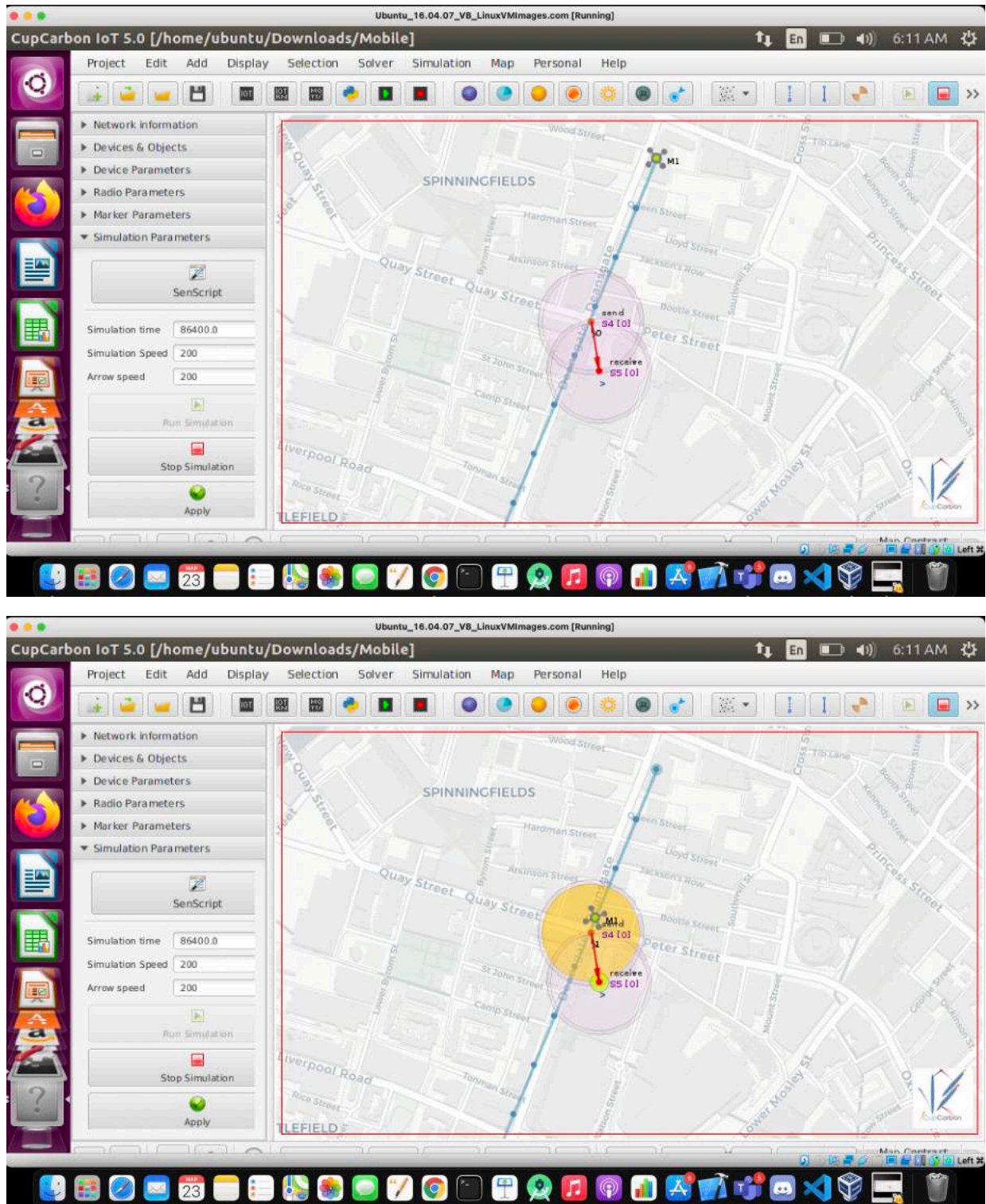




5. Save the marker to the route (route1.gps) and assign it to the mobile node



## 6. Start the simulation

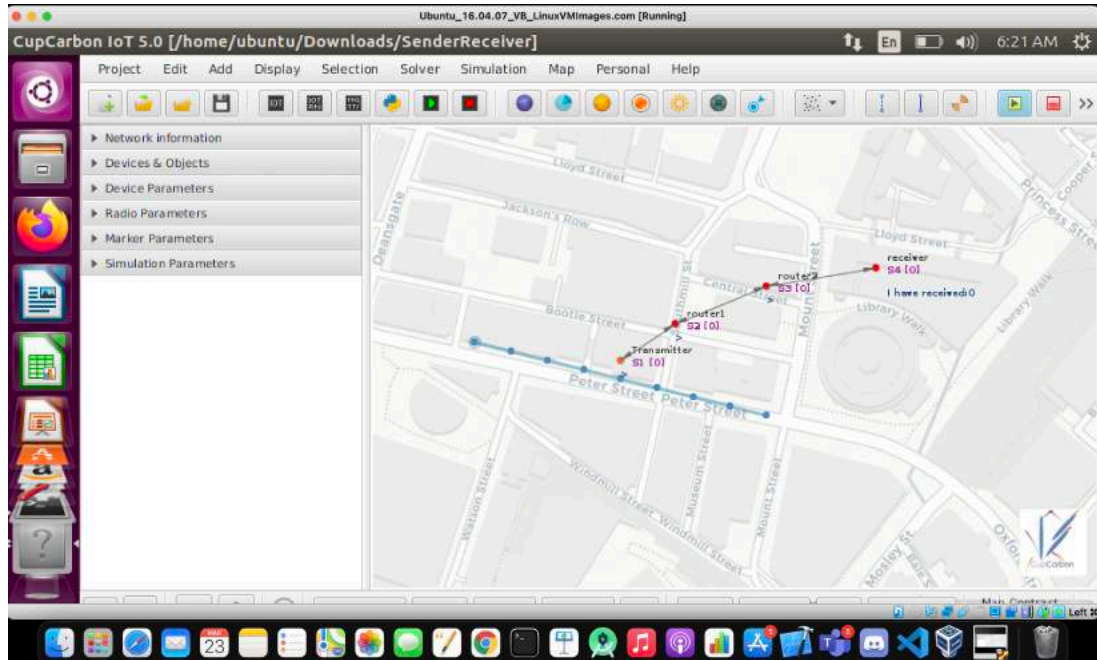


The sender sends the message '0' to the receiver when the mobile node is not within the sender node's range and it sends the message '1' when the mobile node is in the sender's range.

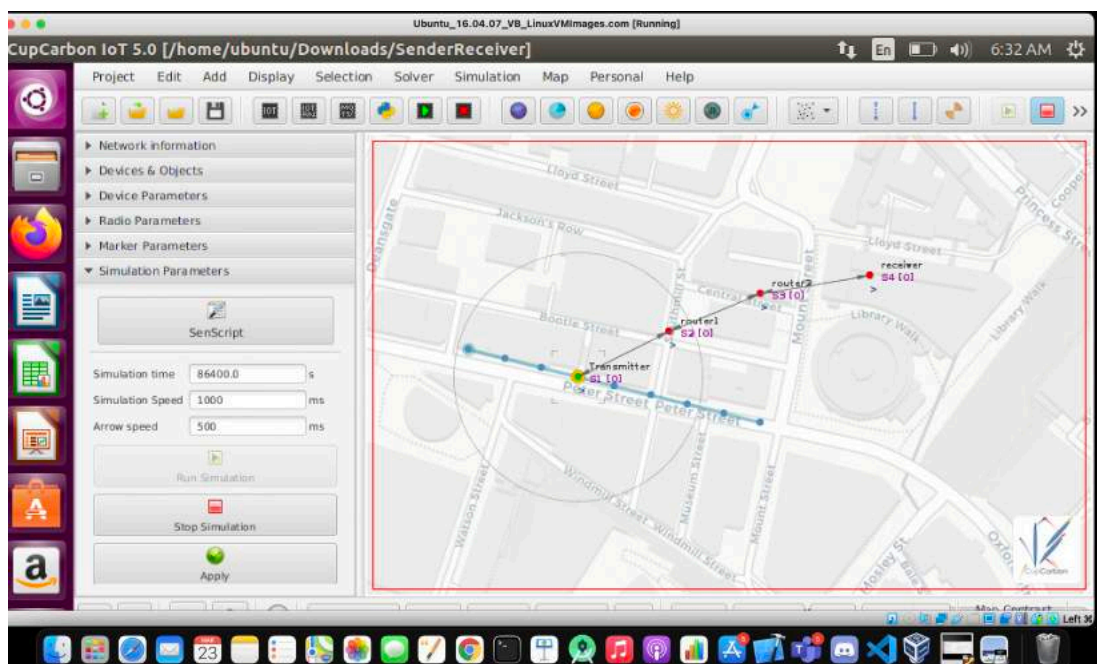


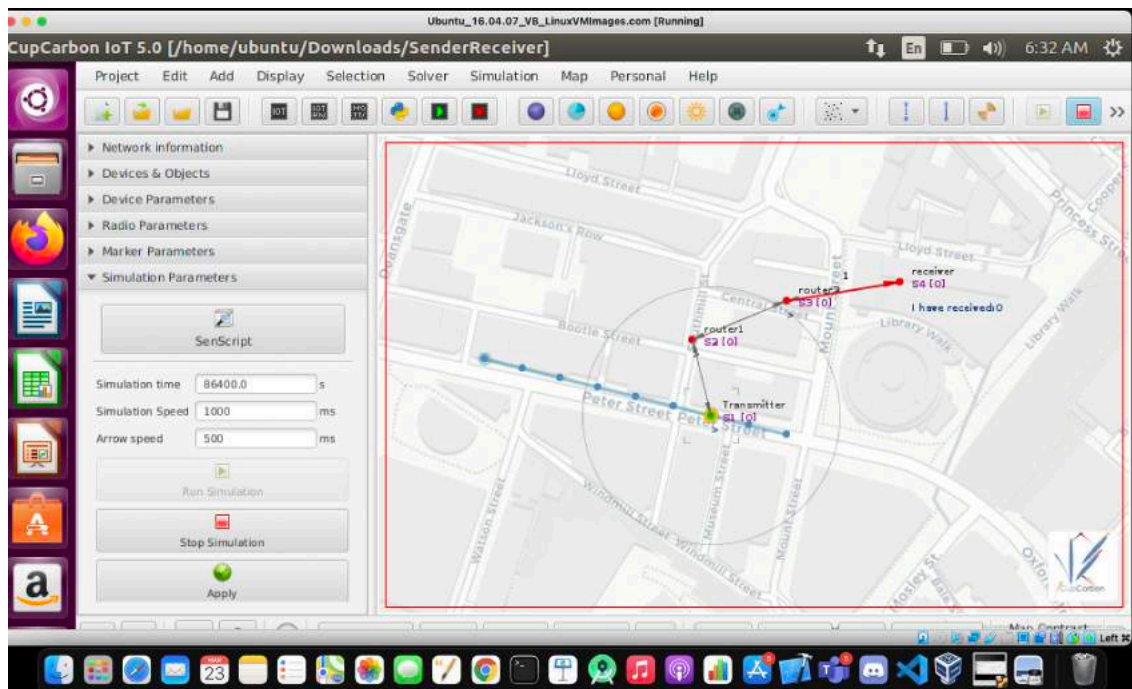
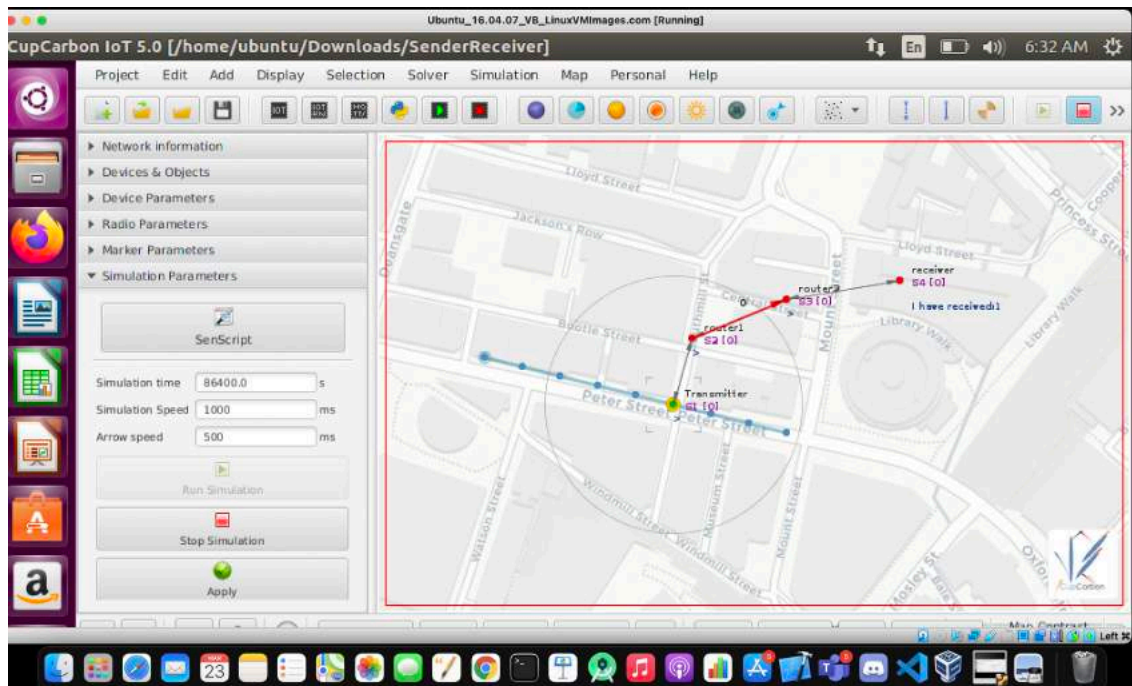
## WITH ROUTING

1. Create a sender node and a receiver node with multiple routers between them. At its side, create a route (route1.gps) using markers as shown previously



2. Make the sender node mobile by assigning the route to it and start the simulation.





The message is sent to the receiver when the sender node falls in the range of the router.

**Conclusion**: Hence, mobility sensing using cupcarbon was implemented successfully.