## E PERIMENT-19 X IOT BASED SMART HOME APPLICATIONS

**Aim:** To implement IoT based smart home applications in Cisco Packet Tracer.

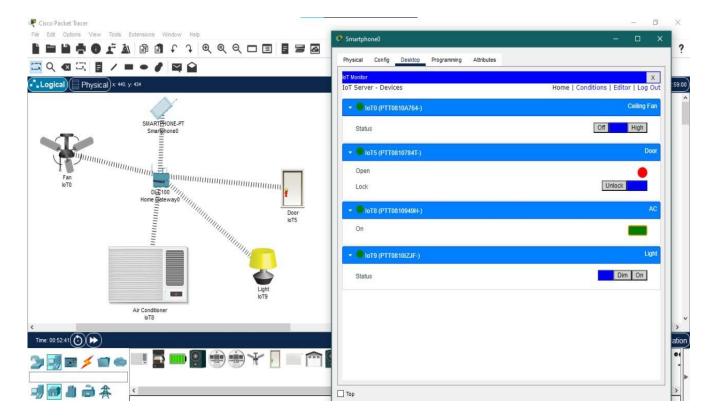
**Software/Apparatus required:** Packet Tracer/End devices, Hubs, connectors.

## **Procedure:**

## **Steps:**

- 1. Create a network topology in Cisco Packet Tracer that includes IoT devices such as sensors, actuators, and gateways.
- 2. Configure the IoT devices with appropriate IP addresses, subnet masks, and gateway addresses.
- 3. Set up a communication protocol between the IoT devices using MQTT, CoAP, or any other protocol of your choice.
- 4. Write a code to collect data from the sensors and send it to the gateway.
- 5. Use the gateway to process the data and send commands to the actuators.
- 6. Finally, use a web interface or mobile application to monitor and control the IoT devices.

By following these steps an IoT-based smart application in Cisco Packet Tracer, can be created. This can be used for various applications such as home automation, smart cities, and industrial automation.



Result: Thus IoT based smart home applications in Cisco Packet Tracer is implemented successfully.