**Problem 01:** Avrix board was not programmable.

**Solution:** It was due to the carbon on programming pins. I cleaned the programming pin and was able to program the board.

**Problem 02:** PIC24 program was not performing the desired functionality.

**Solution:** It was due to the incorrect clock setting. I set the Internal clock source in project settings.

**Problem 03:** SIMCOM was not working properly, was not detected by the computer.

**Solution:** Drivers and ports were updated and also changed the port.

**Problem 04:** Incorrect data was sent to the SIMCOM over UART from the controller.

**Solution:** The data was converted into string and then removed unnecessary spaces.

**Problem 05:** Toggle switch was not working with controller.

**Solution:** The ADC ports were initialized as digital ports.

**Problem 06:** New state was not updated after changing the state of lights.

**Solution:** The ADC wasn’t being read by the controller.

**Problem 07:** Modem should restart at connection close.

**Solution:** We’ll check whenever connection close response came in the LUA script.

**Problem 08:** ADC was not getting any input.

**Solution:** The ADC wasn’t being read by the controller.