## Day 7: Wi-Fi Deauthentication using ESP8266 (June 25, 2025)

**Topics Covered**:

- Wi-Fi deauthentication attacks.
- ESP8266 as a deauthentication tool.
- Wlan0 driver setup for monitor mode and packet injection.

**What I Did:**

I learned to use the ESP8266 NodeMCU for Wi-Fi deauthentication attacks, which disconnect clients from a network. I also configured the wlan0 Wi-Fi adapter for monitor mode.

**Tools and Hardware Used:**

- ESP8266 NodeMCU microcontroller
- Kali Linux system
- wlan0 Wi-Fi adapter (supports monitor mode and injection)

**Steps Followed:**

**ESP8266 Setup**

- Flashed Wi-Fi Deauther firmware onto ESP8266.
- Connected to ESP8266's access point.
- Accessed ESP8266 web interface (192.168.4.1).
- Scanned networks and started deauthentication attack.

**Key Learnings:**

- ESP8266 is a cheap tool for wireless testing.
- Deauthentication attacks simulate DoS.
- Monitor mode and packet injection are needed for wireless testing.
- These attacks must be done on authorized networks only.