

**WIFI HACKING 101****EXP.NO: 13****DATE:08-04-2025****AIM:**

To understand and demonstrate how to capture and crack WPA/WPA2 personal Wi-Fi passwords using Aircrack-ng tools.

**ALGORITHM:**

1. Put the wireless interface into monitor mode.
2. Capture the 4-way handshake using airodump-ng.
3. (Optional) Deauthenticate a connected client to trigger handshake.
4. Use aircrack-ng with a wordlist to brute-force the password.
5. (Optional) Convert capture to HCCAPX format for GPU-based cracking with Hashcat.

**OUTPUT:**

Answer the questions below

What type of attack on the encryption can you perform on WPA(2) personal?

brute force

✓ Correct Answer

🔍 Hint

Can this method be used to attack WPA2-EAP handshakes? (Yea/Nay)

Nay

✓ Correct Answer

What is the three-letter abbreviation for the pre-shared key used in Wi-Fi security?

PSK

✓ Correct Answer

What's the minimum length of a WPA2 Personal password?

8

✓ Correct Answer

How do you put the interface "wlan0" into monitor mode with Aircrack tools? (Full command)

```
airmon-ng start wlan0
```

✓ Correct Answer

What is the new interface name likely to be after you enable monitor mode?

```
wlan0mon
```

✓ Correct Answer

What do you do if other processes are currently trying to use that network adapter?

```
airmon-ng check kill
```

✓ Correct Answer

🔍 Hint

What tool from the aircrack-ng suite is used to create a capture?

```
airodump-ng
```

✓ Correct Answer

What flag do you use to set the BSSID to monitor?

```
--bssid
```

✓ Correct Answer

🔍 Hint

And to set the channel?

```
--channel
```

✓ Correct Answer

🔍 Hint

And how do you tell it to capture packets to a file?

```
-w
```

✓ Correct Answer

🔍 Hint

What flag do we use to specify a BSSID to attack?

```
-b
```

✓ Correct Answer

🔍 Hint

What flag do we use to specify a wordlist?

```
-w
```

✓ Correct Answer

🔍 Hint

How do we create a HCCAPX in order to use hashcat to crack the password?

```
-j
```

✓ Correct Answer

🔍 Hint

Using the rockyou wordlist, crack the password in the attached capture. What's the password?

```
greeneggsandham
```

✓ Correct Answer

🔍 Hint

Where is password cracking likely to be fastest, CPU or GPU?

```
GPU
```

✓ Correct Answer

🔍 Hint

## RESULT:

In this experiment, we demonstrated the process of capturing and cracking WPA2 Passwords using tools like Air cracking and Hashcat. The experiment also highlighted that GPU-based cracking is faster than CPU-based cracking.