## Mission 6

Figure out the Dark Side's secret wireless key by using Aircrack-ng.

## Solution:

Change directory to where the word lists file is, and run the following command:

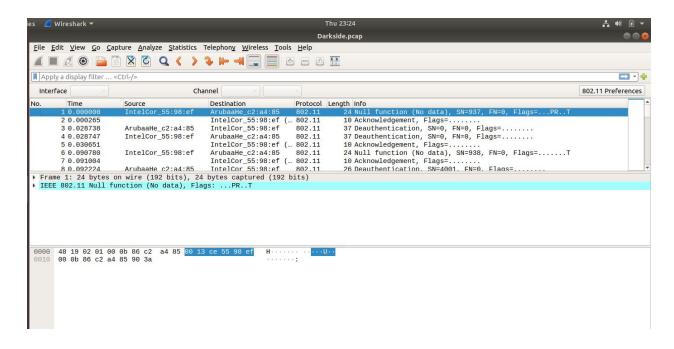
```
sysadmin@UbuntuDesktop:~/darkside$ cd /usr/share/wordlists
sysadmin@UbuntuDesktop:/usr/share/wordlists$ ls
rockyou.txt
sysadmin@UbuntuDesktop:/usr/share/wordlists$ sudo aircrack-ng -w rockyou.txt ~/darkside/Da
rkside.pcap
Opening /home/sysadmin/darkside/Darkside.pcap
Read 586 packets.
  # BSSID
                        ESSID
                                                  Encryption
  1 00:0B:86:C2:A4:85 linksys
                                                 WPA (1 handshake)
Choosing first network as target.
Opening /home/sysadmin/darkside/Darkside.pcap
Reading packets, please wait...
                                Aircrack-ng 1.2 rc4
     [00:00:01] 2300/8053877 keys tested (1920.24 k/s)
     Time left: 1 hour, 9 minutes, 53 seconds
                                                             0.03%
                         KEY FOUND! [ dictionary ]
                    : 5D F9 20 B5 48 1E D7 05 38 DD 5F D0 24 23 D7 E2
     Master Key
                      52 22 05 FE EE BB 97 4C AD 08 A5 2B 56 13 ED E2
```

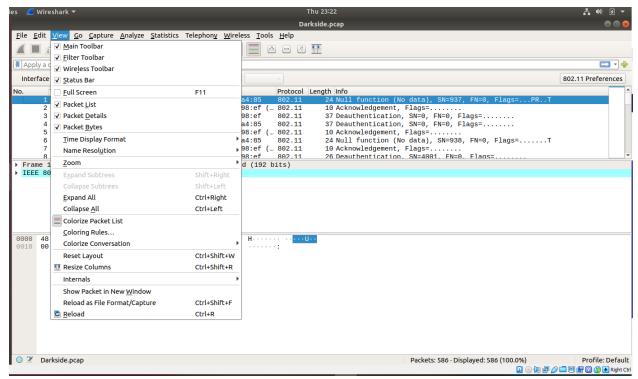
```
1 00:0B:86:C2:A4:85 linksys
                                                  WPA (1 handshake)
Choosing first network as target.
Opening /home/sysadmin/darkside/Darkside.pcap
Reading packets, please wait...
                                Aircrack-ng 1.2 rc4
      [00:00:01] 2300/8053877 keys tested (1920.24 k/s)
     Time left: 1 hour, 9 minutes, 53 seconds
                                                                0.03%
                         KEY FOUND! [ dictionary ]
     Master Key
                    : 5D F9 20 B5 48 1E D7 05 38 DD 5F D0 24 23 D7 E2
                       52 22 05 FE EE BB 97 4C AD 08 A5 2B 56 13 ED E2
     Transient Key : 1B 7B 26 96 03 F0 6C 6C D4 03 AA F6 AC E2 81 FC
                       55 15 9A AF BB 3B 5A A8 69 05 13 73 5C 1C EC E0
                       A2 15 4A E0 99 6F A9 5B 21 1D A1 8E 85 FD 96 49
                      5F B4 97 85 67 33 87 B9 DA 97 97 AA C7 82 8F 52
      EAPOL HMAC : 6D 45 F3 53 8E AD 8E CA 55 98 C2 60 EE FE 6F 51
sysadmin@UbuntuDesktop:/usr/share/wordlists$
```

The cracked passphrase is: dictionary.

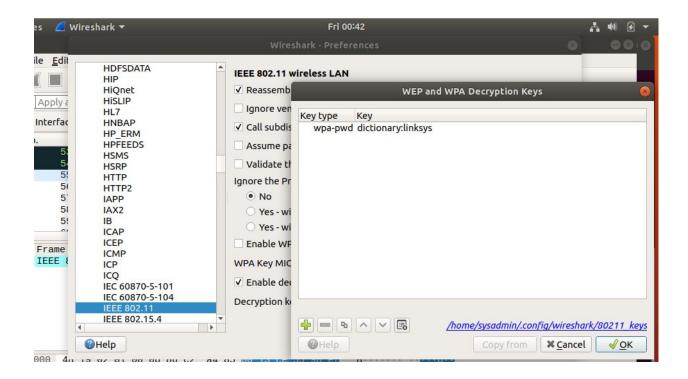
Then run wireshark on Darkside.pcap like:

```
sysadmin@UbuntuDesktop:~/darkside$
sysadmin@UbuntuDesktop:~/darkside$ wireshark Darkside.pcap
```



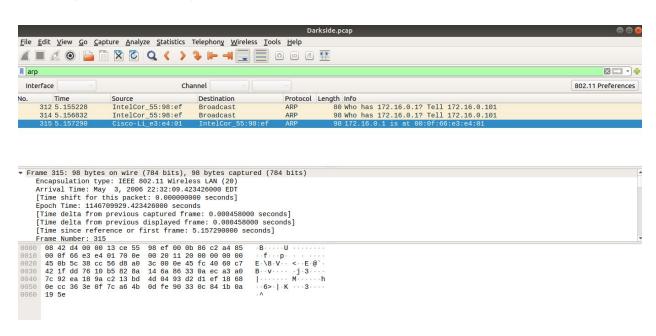


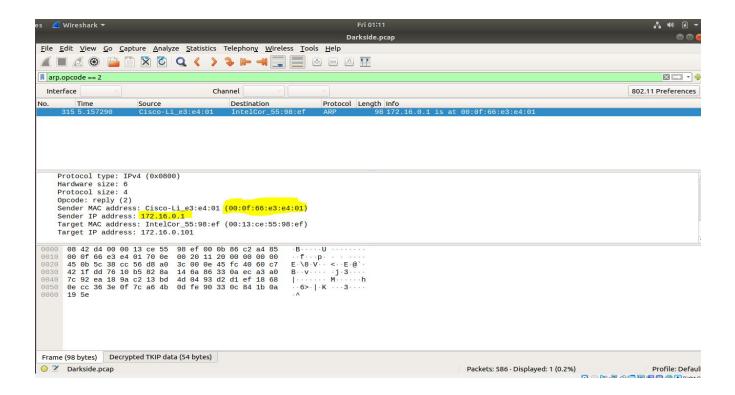
Type in the passphrase with the SSID separated only by colon in the WEP and WPA Decryption keys Window shown below.



## Click the OK button.

Looking into the decrypted arp traffic,





The host IP address is 172.16.0.1
The MAC address is 00:0f:66:e3:e4:01