Week 9 Homework: Network Fundamentals II-In a Network Far, Far Away!

Mission 1

Command(s) utilized:

```
581   nslookup starwars.com
582   nslookup -type=any starwars.com
```

Documentation of the mail servers:

```
starwars.com      mail exchanger = 1 aspmx.l.google.com.
starwars.com      mail exchanger = 5 alt2.aspmx.l.google.com.
starwars.com      mail exchanger = 10 aspmx2.googlemail.com.
starwars.com      mail exchanger = 5 alt1.aspx.l.google.com.
starwars.com      mail exchanger = 10 aspmx3.googlemail.com.
```

Why is the Resistance not receiving any emails:

They are not receiving emails because neither server is actually there

Documentation of corrected DNS record:

Update by replacing with what is provided as shown below.

Server: 8.8.8.8
Address: 8.8.8.8#53
Non-authoritative answer:
starwars.com mail exchanger = 5 alt2.aspmx.l.google.com.
starwars.com mail exchanger = 10 aspmx3.googlemail.com.
starwars.com   mail exchanger = 1 asltx.1.google.com
starwars.com mail exchanger = 10 aspmx2.googlemail.com.
starwars.com   mail exchanger = 5 asltx.2.google.com

Mission 2

Command(s) utilized:

```
sysadmin@UbuntuDesktop:~$ nslookup -type=txt theforce.net
```

Documentation of the SPF on site:

```
Server:         8.8.8.8
Address:        8.8.8.8#53

Non-authoritative answer:
theforce.net    text = "google-site-verification=ycgY7mtk2oUZMagcffhFL_Qaf8Lc9tMRkZZSu
ig0d6w"
theforce.net    text = "google-site-verification=XTU_We07Cux-6WCSOItl0c_WS29hzo92jPE34
1ckbOQ"
theforce.net    text = "v=spf1 a mx mx:smtp.secureserver.net include:aspmx.googlemail.
com ip4:104.156.250.80 ip4:45.63.15.159 ip4:45.63.4.215"
```

Why are the Force's emails going to spam:

The emails are going to spam because the is not in there.

Documentation of correct DNS record:

The txt record needs to be updated to include the ip address that was provided.

Mission 3

Command(s) utilized:

```
sysadmin@UbuntuDesktop:~$ nslookup -q=cname www.theforce.net
```

Documentation of CNAME:

```
Server:         8.8.8.8
Address:        8.8.8.8#53

Non-authoritative answer:
www.theforce.net        canonical name = theforce.net.
```

Explain why resistance.theforce.net isn't redirecting to theforce.net:

Because the CNAME record has not been set for theforce.net as of yet.

Documentation of correct DNS record:

Update the CNAME record to redirect to theforce.net.

Mission 4

Command(s) utilized:

```
sysadmin@UbuntuDesktop:~$ nslookup -type=ns princessleia.site
```

Confirmation of princlessleia.site:
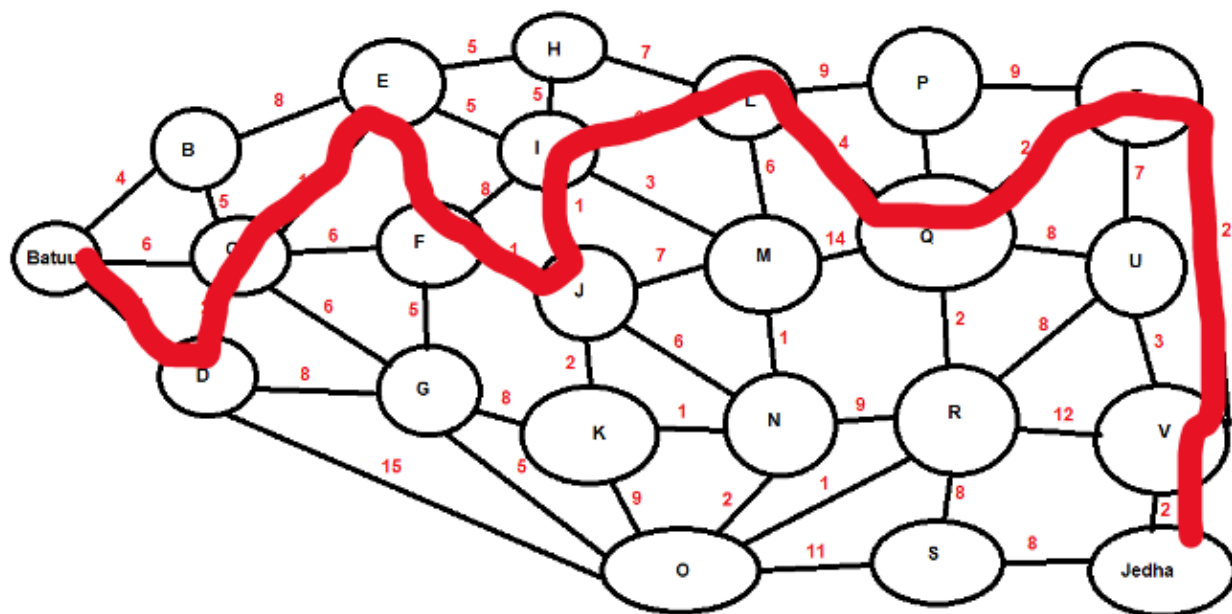
```
Server:          8.8.8.8
Address:         8.8.8.8#53

Non-authoritative answer:
princessleia.site        nameserver = ns25.domaincontrol.com.
princessleia.site        nameserver = ns26.domaincontrol.com.
```

Document of how to fix the DNS record to prevent from happening again:

Update NS record to include the other back-up server of ns2.galazybackup.com

Mission 5

Batuu, D (1), C (2), E (1), F (1), J (1), I (1), L (6), Q (4), T(2), V (2), Jedha –Total of 21 Hops
**It is not about distance it is about the speed.

Mission 6

Command(s) utilized:

```
sysadmin@UbuntuDesktop:~/Downloads$ aircrack-ng -w /usr/share/wordlists/rockyou.txt Da
rkside.pcap
```

Darkside Key:

```
                    Aircrack-ng 1.2 rc4

    [00:00:01] 2280/8053877 keys tested (2207.72 k/s)

    Time left: 1 hour, 48 seconds                         0.03%

                    KEY FOUND! [ dictionary ]
```

Host IP Addresses:

Sender
```
Sender IP address: 172.16.0.1
```

Destination
```
Target IP address: 172.16.0.101
```

Host MAC addresses:

Sender
```
Sender MAC address: Cisco-Li_e3:e4:01 (00:0f:66:e3:e4:01)
```

Destination
```
Target MAC address: IntelCor_55:98:ef (00:13:ce:55:98:ef)
```

Mission 7

Command(s) utilized:

```
586  telnet towel.blinkenlights.nl
sysadmin@UbuntuDesktop:~$ nslookup -type=txt princessleia.site
```

Hidden message:

```
Server:        8.8.8.8
Address:       8.8.8.8#53

Non-authoritative answer:
princessleia.site        text = "Run the following in a command line: telnet towel.blin
kenlights.nl or as a backup access in a browser: www.asciimation.co.nz"
```

Got to watch Star Was Episode IV A New Hope