In a Network Far, Far Away!

Make a copy of this document to work in, and then for each mission, add the solution below the prompt. Save and submit this completed file as your Challenge deliverable.

Mission 1

1. Mail servers for starwars.com:

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

2. Explain why the Resistance isn't receiving any emails:

```
The primary email server should be asltx.l.google.com and the secondary
email server should be asltx.2.google.com. When completing the nslookup MX
the primary email for starwars.com is aspmx.l.google.com instead of
asltx.l.google.com, and the secondary email for starwars.com is
alt1.aspx.l.google.com and alt2.aspmx.l.google.com instead of
asltx.2.google.com.
```

3. Suggested DNS corrections:

```
Change the starwars.com mail exchange server to mail exchanger = 1
asltx.l.google.com for the primary mail server and change the mail exchanger
= 5 asltx.2.google.com for the secondary mail server.
```

Mission 2

1. Sender Policy Framework (SPF) of `theforce.net`:

```
Server:          8.8.8.8
Address:     8.8.8.8#53

Non-authoritative answer:
theforce.net      text =
"google-site-verification=ycgY7mtk2oUZMagcffhFL_Qaf8Lc9tMRkZZSuig0d6w"
theforce.net      text = "v=spf1 a mx a:mail.wise-advice.com
mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:104.156.250.80
ip4:45.63.15.159 ip4:45.63.4.215  ip4:104.207.135.156 ~all"
theforce.net      text =
"google-site-verification=XTU_We07Cux-6WCSOItl0c_WS29hzo92jPE341ckbOQ"
```

2. Explain why the Force's emails are going to spam:

```
The new IP address of their mail server, 45.23.176.21, is not listed under
SPF
```

3. Suggested DNS corrections:

```
Change "v=spf1 a mx a:mail.wise-advice.com mx:smtp.secureserver.net
include:aspmx.googlemail.com ip4:104.156.250.80 ip4:45.63.15.159
ip4:45.63.4.215  ip4:104.207.135.156 ~all" to "v=spf1 a mx
a:mail.wise-advice.com mx:smtp.secureserver.net include:aspmx.googlemail.com
ip4:104.156.250.80 ip4:45.63.15.159 ip4:45.63.4.215  ip4:45.23.176.21 ~all"
```

Mission 3

1. Document the CNAME records:

```
Server:          8.8.8.8
Address:    8.8.8.8#53

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

2. Explain why the subpage `resistance.theforce.net` isn't redirecting to `theforce.net`:

```
resistance.theforce.net is not linked to www.theforce.net
```

3. Suggested DNS corrections:

```
Add the cname resistance.theforce.net to redirect to www.theforce.net
```

Mission 4

1. Confirm the DNS records for `princessleia.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.
```

2. Suggested DNS record corrections to prevent the issue from occurring again:

```
Add the backup server, ns2.galaxybackup.com, for princessleia.site to the
DNS record
```

Mission 5

1. Document the shortest `OSPF` path from Batuu to Jedha:

   a. `OSPF` path:

```
D-G-O-R-Q-T-V-Jedha
```

  b. `OSPF` path cost:

```
23
```

Mission 6

 1. Wireless key:

```
dictionary
```

 2. Host IP addresses and MAC addresses:

  a. Sender MAC address:

```
00:13:ce:55:98:ef
```

  b. Sender IP address:

```
172.16.0.101
```

  c. Target MAC address:

```
00:0f:66:e3:e4:01
```

  d. Target IP address:

```
172.16.0.1
```

Mission 7

1. Screenshot of results: