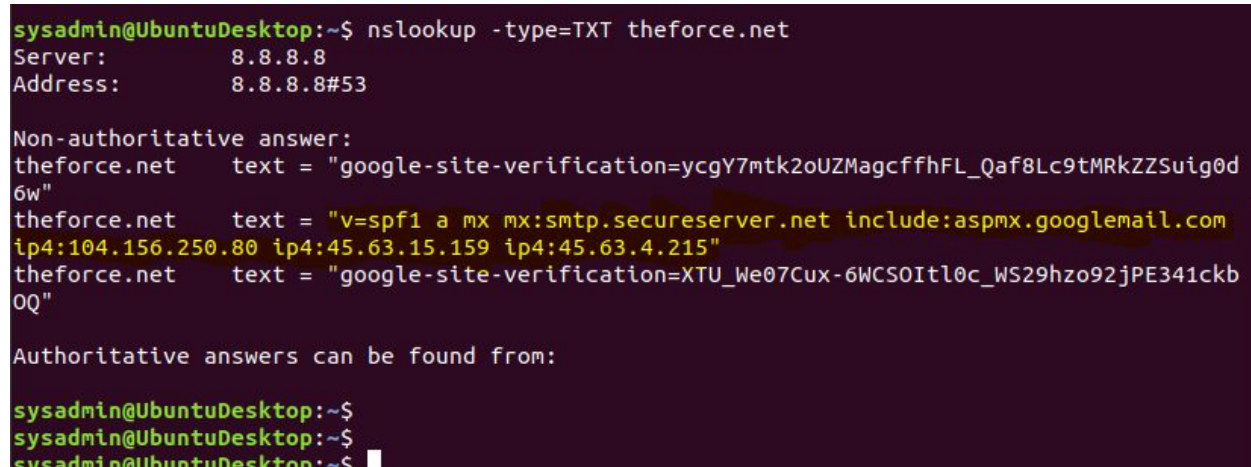


Mission 2

Determine and document the SPF for **theforce.net** using NSLOOKUP.

Solution:

```
$ nslookup -type=TXT theforce.net
```

A terminal window with a dark purple background. The prompt is 'sysadmin@UbuntuDesktop:~\$'. The command 'nslookup -type=TXT theforce.net' has been executed. The output shows the server as 8.8.8.8 and the address as 8.8.8.8#53. It then displays three non-authoritative text records for theforce.net: a google-site-verification record, an SPF record for smtp.secureserver.net with IP addresses 104.156.250.80, 45.63.15.159, and 45.63.4.215, and another google-site-verification record. The prompt is repeated three times at the bottom.

```
sysadmin@UbuntuDesktop:~$ nslookup -type=TXT 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 mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:104.156.250.80 ip4:45.63.15.159 ip4:45.63.4.215"
theforce.net          text = "google-site-verification=XTU_We07Cux-6WCS0Itl0c_WS29hzo92jPE341ckb0Q"

Authoritative answers can be found from:

sysadmin@UbuntuDesktop:~$
sysadmin@UbuntuDesktop:~$
sysadmin@UbuntuDesktop:~$
```

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

Solution:

Since **theforce.net** changed the IP address of their mail server to **45.23.176.21**, and the **SPF record** was not updated with the new IP address as a mail server allowed to send emails on behalf of the domain, the receiving mail server will check the incoming mail IP address (45.23.176.21) and validate it with the SPF record to check for it authorization. In this scenario, the **Received-SPF** will fail because theforce.com does not designate 45.23.176.21 as **permitted sender**.

Document what a corrected DNS record should be.

Solution:

theforce.com needs to edit their SPF record to set the new IP address as permitted sender.

The correct DNS record should be like:

v=spf1 ip4:45.23.176.21