Task 1 — What is DNS?

Question 1 — What does DNS stand for?

 $\underline{\mathbf{R}}$: Domain Name System

Task 2 — Domain Hierarchy

Question 1 — What is the maximum length of a subdomain?

<u>R</u>:63

Question 2 — Which of the following characters cannot be used in a subdomain ($3b_-$)?

<u>R</u>:_

Question 3 — What is the maximum length of a domain name?

<u>R</u>: 253

Question 4 — What type of TLD is . $\underline{\text{co.uk}}$?

 $\underline{\mathbf{R}}$: ccTLD

<u>Task 3</u> — Record Types

Question 1 — What type of record would be used to advise where to send email?

 $\underline{\mathbf{R}}:\mathbf{M}\mathbf{X}$

Question 2 — What type of record handles IPv6 addresses?

 $\underline{\mathbf{R}}: \mathbf{A}\mathbf{A}\mathbf{A}\mathbf{A}$

Task 4 — Making A Request

Question 1 — What field specifies how long a DNS record should be cached for?

R:TTL

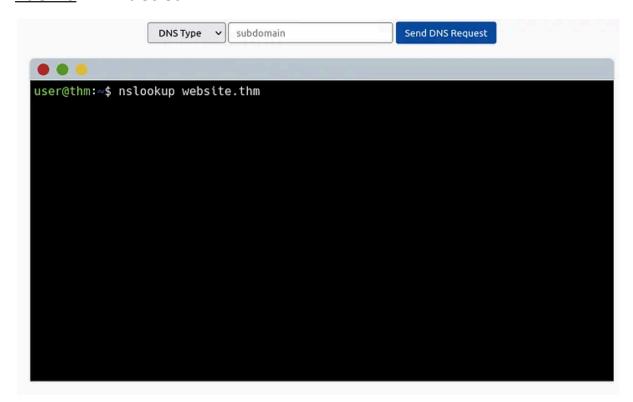
Question 2 — What type of DNS Server is usually provided by your ISP?

 $\underline{\mathbf{R}}$: Recursive

Question 3 — What type of server holds all the records for a domain?

<u>R</u>: Authoritative

Task 5 — Practical



Question 1 — What is the CNAME of shop.website.thm?

```
user@thm:~$ nslookup --type=CNAME shop.website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53
Non-authoritative answer:
shop.website.thm canonical name = shops.myshopify.com
```

 $\underline{\mathbf{R}}: \underline{\mathbf{shops.myshopify.com}}$

Question 2 — What is the value of the TXT record of website.thm?

```
user@thm:~$ nslookup --type=TXT website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
website.thm text = "THM{7012BBA60997F35A9516C2E16D2944FF}"
```

 $R: THM{7012BBA60997F35A9516C2E16D2944FF}$

Question 3 — What is the numerical priority value for the MX record?

```
user@thm:~$ nslookup --type=MX website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
website.thm mail exchanger = 30 alt4.aspmx.l.google.com
```

<u>R</u>: 30

Question 4 — What is the IP address for the A record of

www.website.thm?

```
user@thm:~$ nslookup --type=A website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53
Non-authoritative answer:
Name: website.thm
Address: 10.10.10.10
```

<u>R</u>: 10.10.10.10