Exercise: Networks, Internet and Protocols

Problems for exercises and homework for the "Software Technologies" course @ Software University.

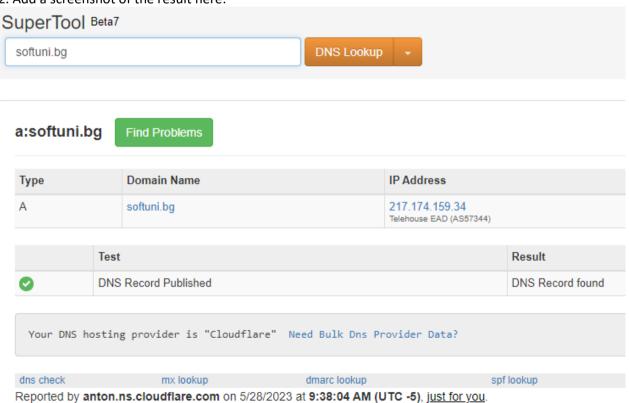## 1. Trace the route to a certain IP address

1. Use the ping command to test connectivity to an external website of your choosing /Example: wikipedia.com/
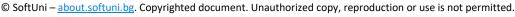2. Add a screenshot of the result here:

```
C:\Users\Stefcho>ping www.softuni.bg

Pinging www.softuni.bg [172.67.173.123] with 32 bytes of data:
Reply from 172.67.173.123: bytes=32 time=21ms TTL=57
Reply from 172.67.173.123: bytes=32 time=21ms TTL=57
Reply from 172.67.173.123: bytes=32 time=21ms TTL=57
Reply from 172.67.173.123: bytes=32 time=21ms TTL=57

Ping statistics for 172.67.173.123:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 21ms, Maximum = 21ms, Average = 21ms

C:\Users\Stefcho>
```

2. Find the IP address behind a domain name

1. Using an online DNS lookup tool, like **DNS Checker** or **MX Toolbox** find the IP address of a domain. /Example: medium.com/
2. Add a screenshot of the result here:

SuperTool Beta7

| softuni.bg | DNS Lookup ▾ |

a:softuni.bg   Find Problems

Type	Domain Name	IP Address
A	softuni.bg	217.174.159.34 Telehouse EAD (AS57344)

	Test	Result
✓	DNS Record Published	DNS Record found

Your DNS hosting provider is "Cloudflare" Need Bulk Dns Provider Data?

dns check   mx lookup   dmarc lookup   spf lookup

Reported by **anton.ns.cloudflare.com** on 5/28/2023 at **9:38:04 AM (UTC -5)**, just for you.

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softuni.bg   MX Lookup ▾

mx:softuni.bg   Find Problems   Solve Email Delivery Problems

Pref	Hostname	IP Address	TTL	
5	mx.softuni.bg	217.174.159.10 Telehouse EAD (AS57344)	5 min	Blacklist Check SMTP Test

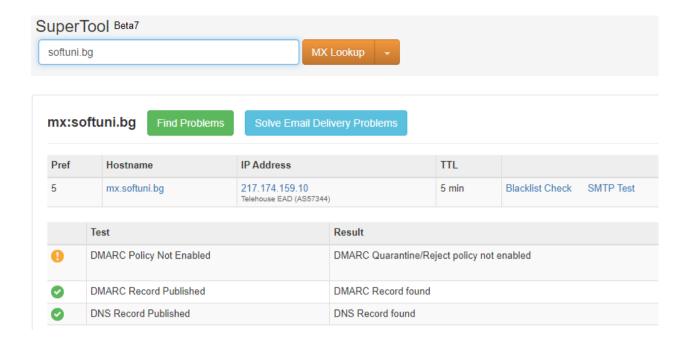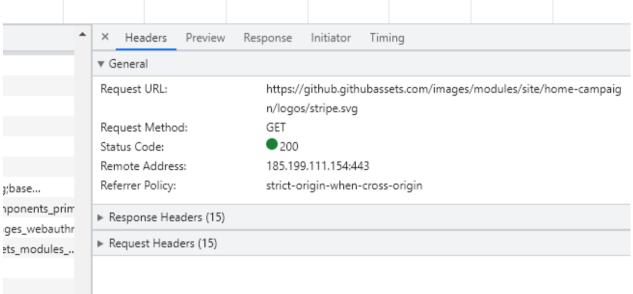|	Test	Result
⚠	DMARC Policy Not Enabled	DMARC Quarantine/Reject policy not enabled
✓	DMARC Record Published	DMARC Record found
✓	DNS Record Published	DNS Record found

3. Execute HTTP GET

1. Using **https://restcountries.com/** and DevTools on your browser. Execute a GET request for a country of your choosing. /Example: https://restcountries.com/v3.1/name/deutschland/
2. Add a screenshot of the result with DevTools open here:

| × | Headers | Preview | Response | Initiator | Timing |

▼ General

Request URL:	https://github.githubassets.com/images/modules/site/home-campaign/logos/stripe.svg
Request Method:	GET
Status Code:	● 200
Remote Address:	185.199.111.154:443
Referrer Policy:	strict-origin-when-cross-origin

▶ Response Headers (15)

▶ Request Headers (15)

Since the site mentioned in point 1 does not respond, I have used github.com

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