

# Protocols and servers

1. On your kali (or other) machine, install `nginx` to have an http server on port 8080. Replace the default page of `nginx` by an html page displaying a hello world.

No answer required

2. What other well-known service could be used instead of `nginx`?

Your answer : `Caddy`

Your command : `curl https://getcaddy.com | bash -s personal`

3. Let's imagine that a hacker owns the domain name `g00gle.com`, which tool would allow him to obtain an ssl certificate (https) very easily?

Your answer : Let's Encrypt \* Installation of Certbot

- Requesting a certificate
- Completing the Verification
- Certificate insurance
- Installing the Certificate

4. On a linux machine, what tool could you use to have a self-signed SSL certificate on your local machine (localhost) ?

Your answer : `openssl`

```
betta@gnt-betta:~$ openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout localhost.key -out localhost.crt -subj "/CN=localhost"
Generating a 2048 bit RSA private key
.....+++
.....+++
writing new private key to 'localhost.key'
```

5. On your student machine, install the ftp service and connect from your kali machine.

No answer required

6. What is the default port for ftp?

Your answer : Port 21

7. Is the ftp protocol secured?

Your answer : No, the FTP (File Transfer Protocol) protocol is not inherently secure. It transmits data, including usernames, passwords, and file contents,

in plaintext, making it vulnerable to eavesdropping and interception by malicious actors.

8. On your student machine, install the telnet service and connect from your kali machine.

No answer required

9. What is the default port for telnet?

Your answer : port 23

10. Is the telnet protocol secured?

Your answer : No, the Telnet protocol is not secure. Telnet transmits data, including usernames, passwords, and all other communication, in plaintext format

11. Create a share file with samba between your Kali machine and your student machine.

No answer required