

CS 361

Computer

Networks Lab

Assignment 3

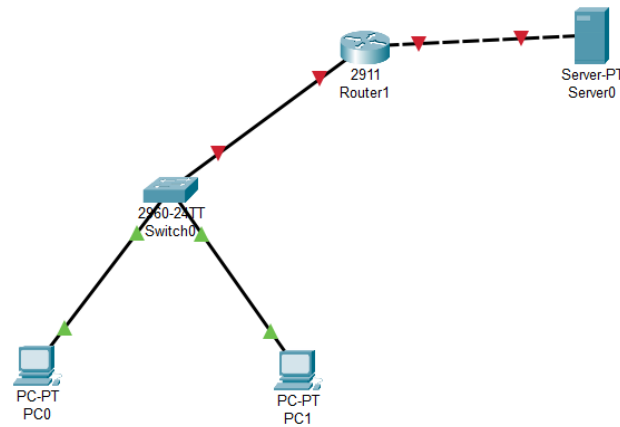
Samanway Maji
Student ID – 202151136
Date – 18/10/2023

Questions:

1. Make a small network with a few PCs, one web server, a switch, and a router (just to give an idea of how to assign a default gateway). Make sure that all the devices are connected (use straight-through cables as we are connecting different devices). Create a web page that should contain your name and your roll number.

Components: End devices (PC), Switch (2960), Router (2911), Server (Server-PT).

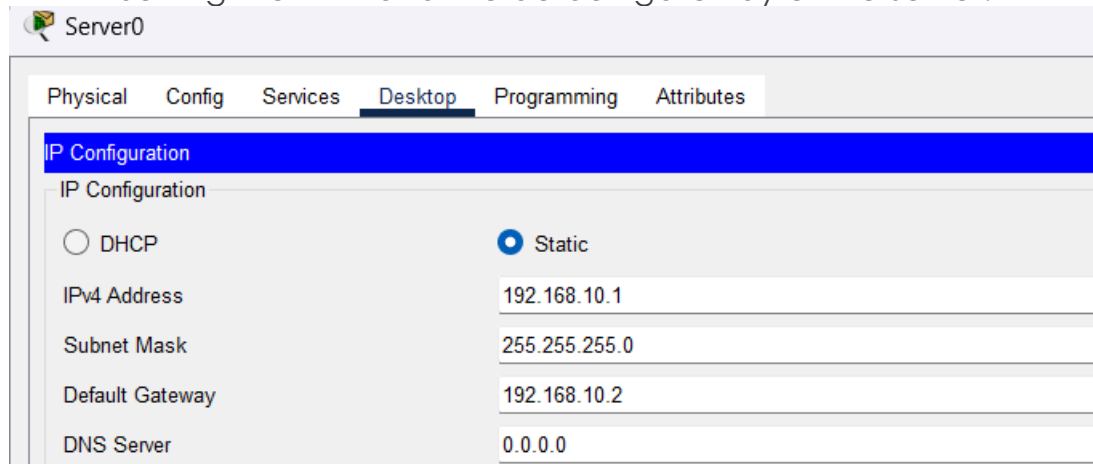
Diagram of the connection:



Setting the IPV4 of the PCs, and the default gateway of the PCs as well:

IPv4 Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	10.10.0.1
Subnet Mask	255.0.0.0
Default Gateway	10.10.0.3
DNS Server	0.0.0.0
IPv6 Configuration	

Setting the IPV4 and the default gateway of the server:



Server0

Physical Config Services **Desktop** Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

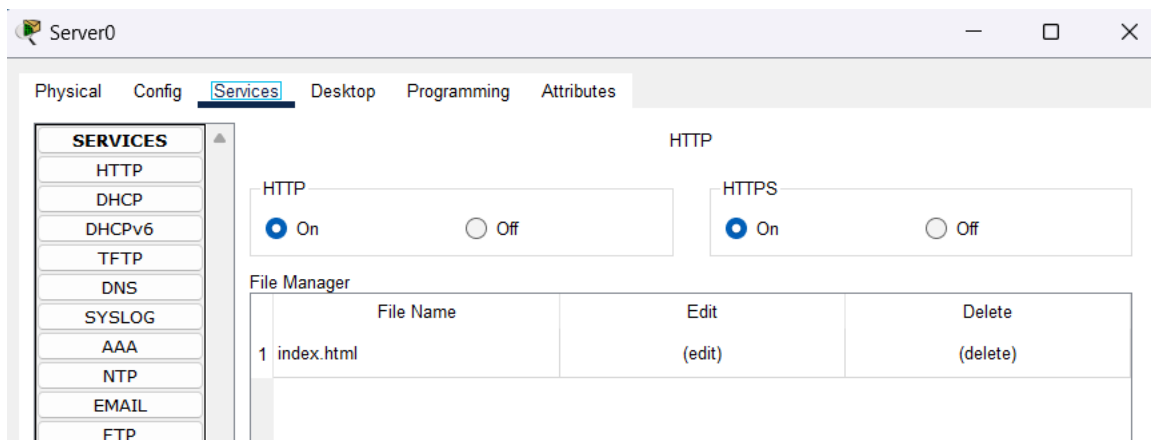
IPv4 Address 192.168.10.1

Subnet Mask 255.255.255.0

Default Gateway 192.168.10.2

DNS Server 0.0.0.0

Enabling the http and the https services in the server, as well as designing the webpage:



Server0

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP

HTTP

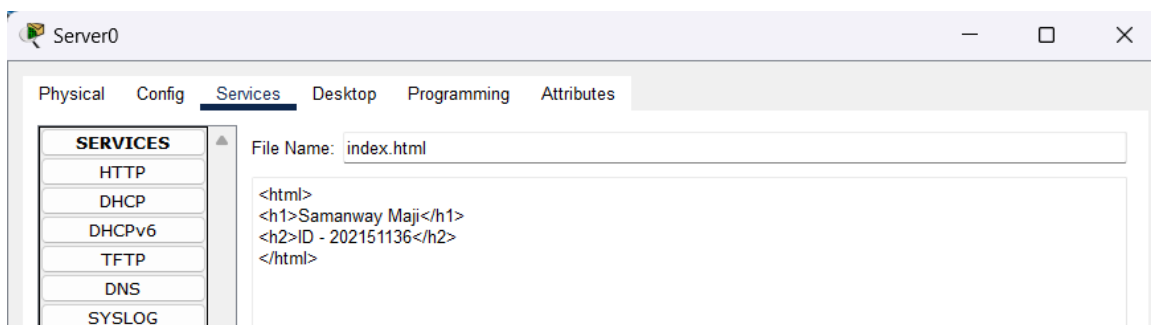
☒ On ☐ Off

HTTPS

☒ On ☐ Off

File Manager

	File Name	Edit	Delete
1	index.html	(edit)	(delete)



Server0

Physical Config **Services** Desktop Programming Attributes

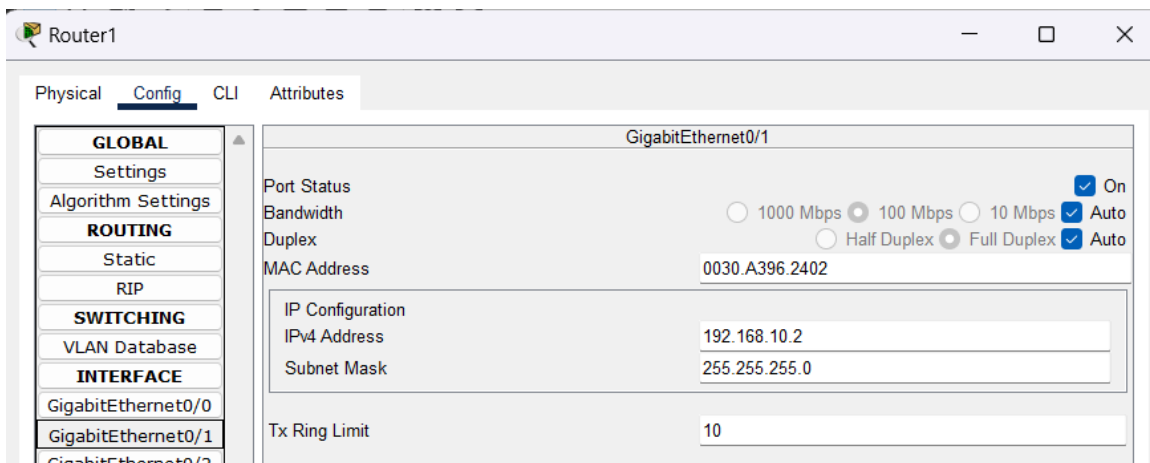
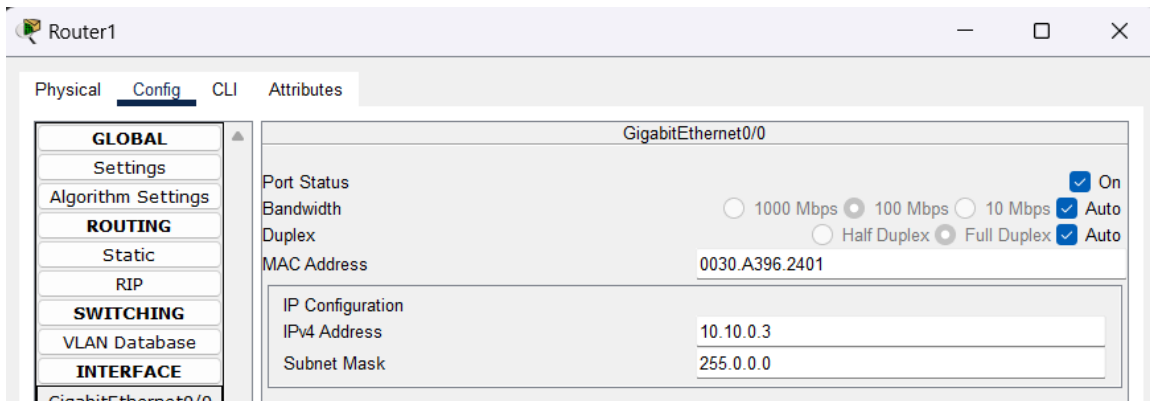
SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG

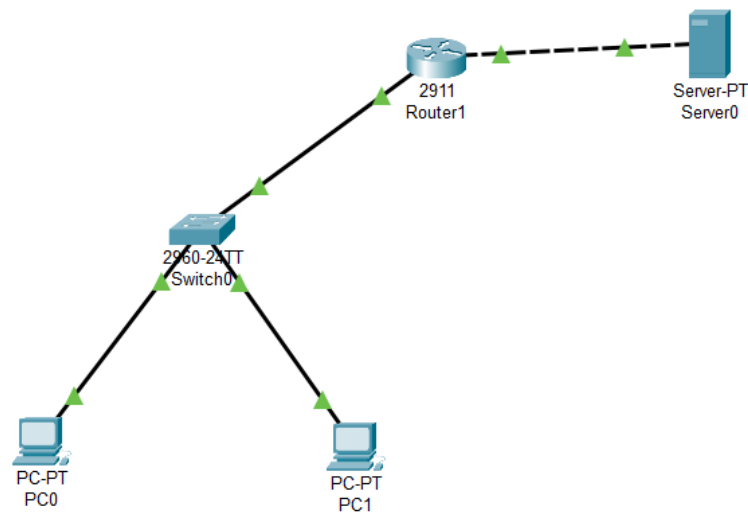
File Name: index.html

```
<html>
<h1>Samanway Maji</h1>
<h2>ID - 202151136</h2>
</html>
```

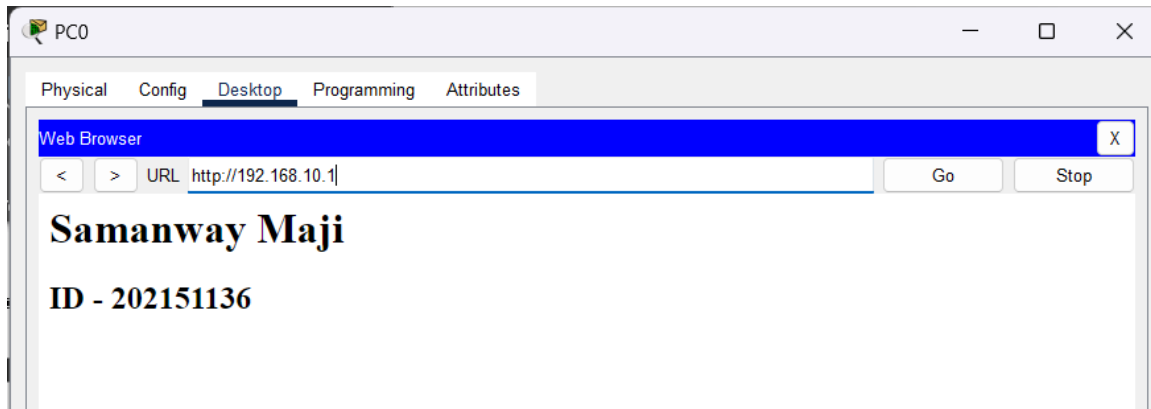
Setting the Gigabit Ethernet 0/0 and 0/1 ports for connecting the PC and the router.



Connection Established, shown by green mark:



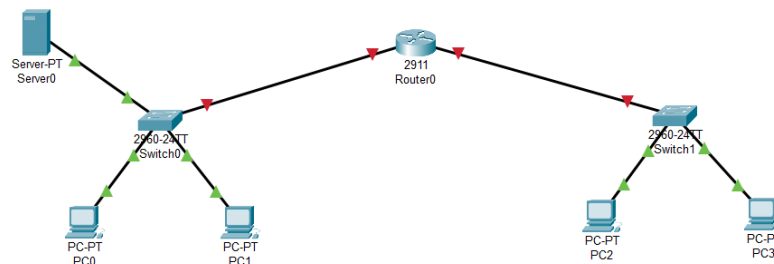
The IPV4 of the server is put in a browser of the PC, which shows the webpage that was designed:



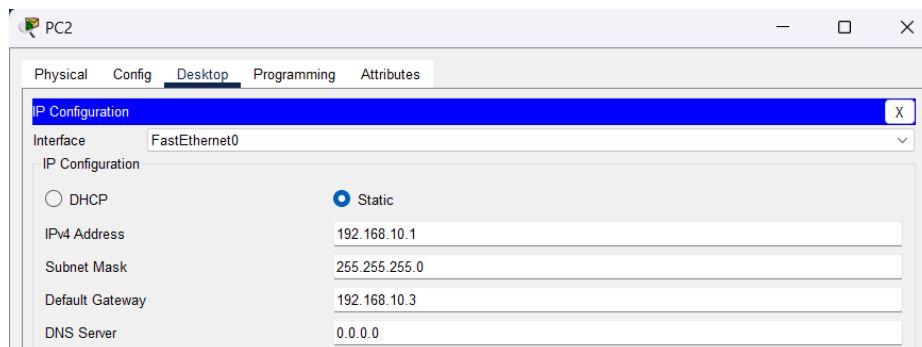
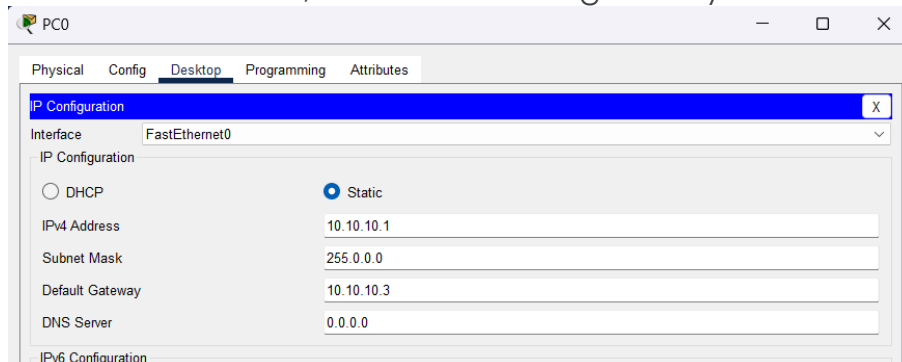
2. Make a complex network having at least two different network addresses. You can use many PCs, switches, and routers. Again, create a web page through a Server. Note that this time the PC used to display the web page should be connected to another network address than a web server.

Components: End devices (PC), Switch (2960), Router (2911), Server (Server-PT).

Diagram of the connection:

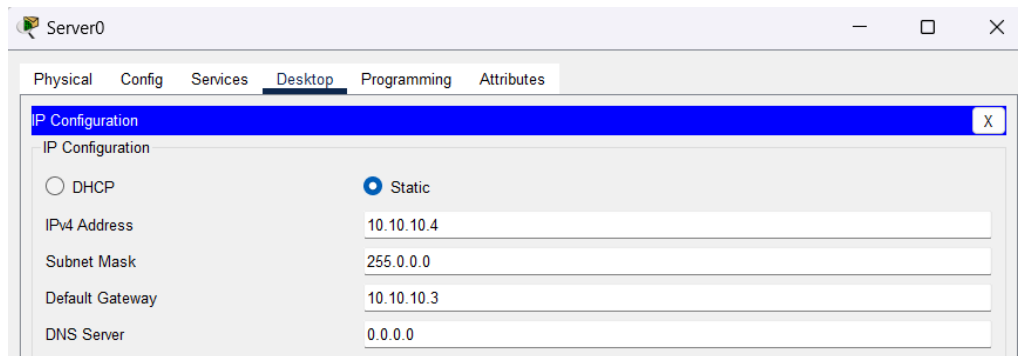


Setting the IPV4 of the PCs, and the default gateway of the PCs as well:

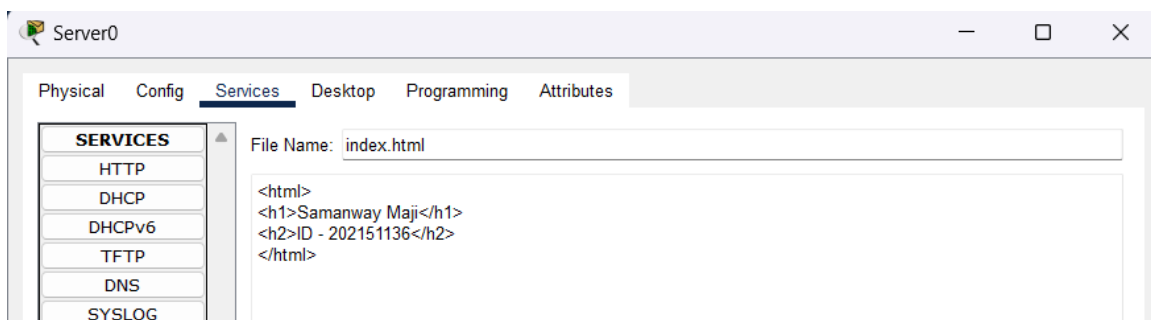
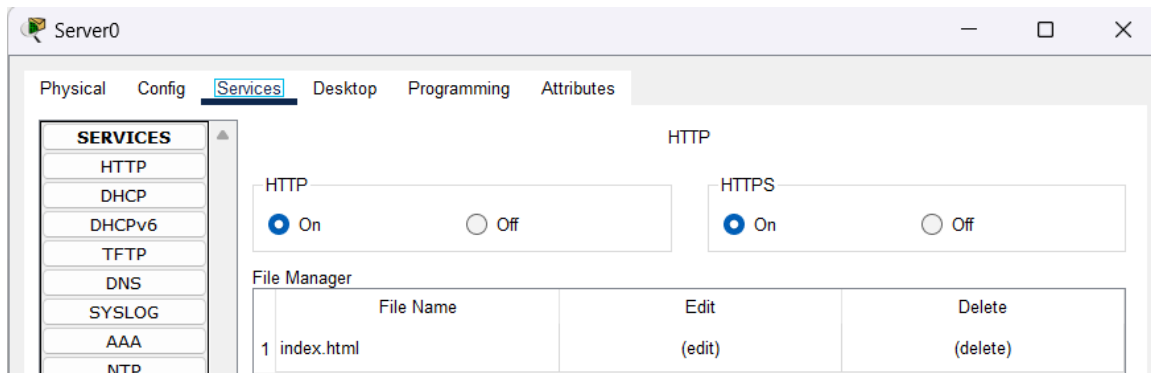


Note PC0 and PC2 are in separate networks, denoted by the different subnet mask.

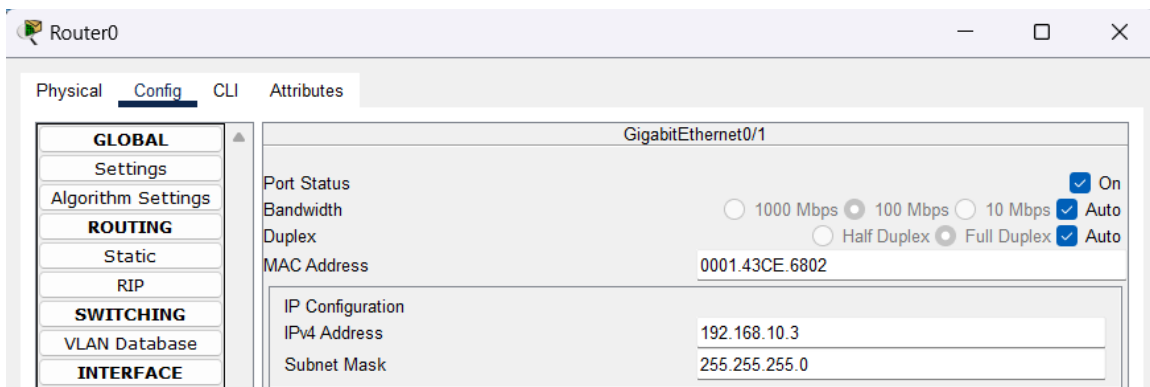
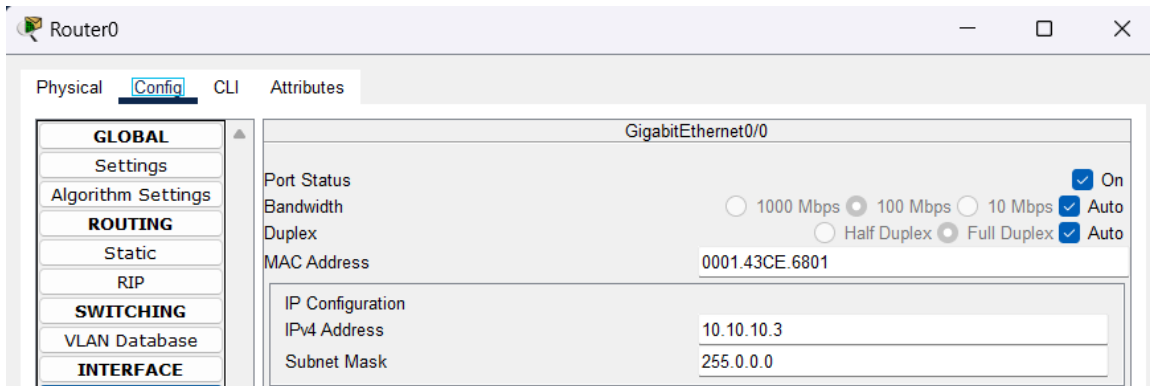
Setting the IPV4 and the default gateway of the server:



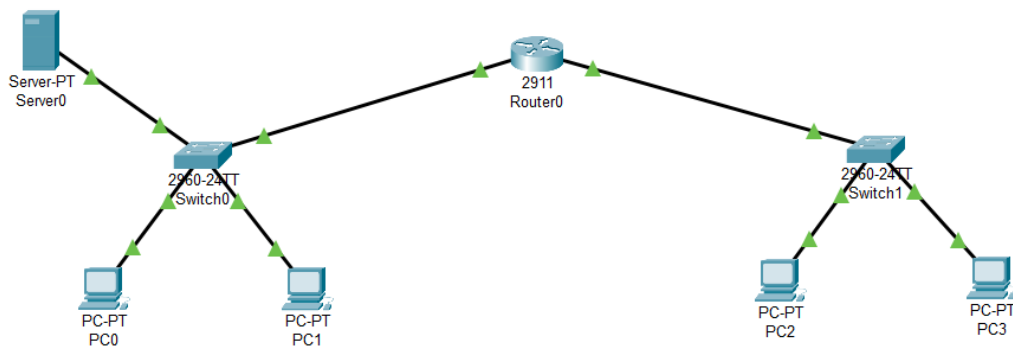
Enabling the http and the https services in the server, as well as designing the webpage:



Setting the Gigabit Ethernet 0/0 and 0/1 ports for connecting the PC and the router.



Connection established, shown by green mark:



The IPV4 of the server is put in a browser of the PC of a different network, which shows the webpage that was designed:

