# CS 361
# Computer Networks Lab

## Assignment 3

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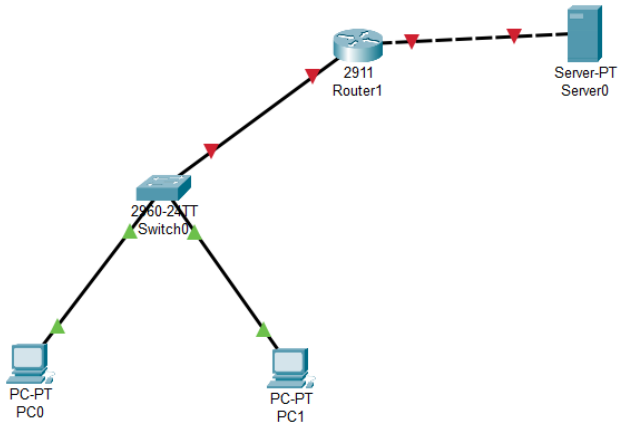
Date – 18/10/2023

# Questions:

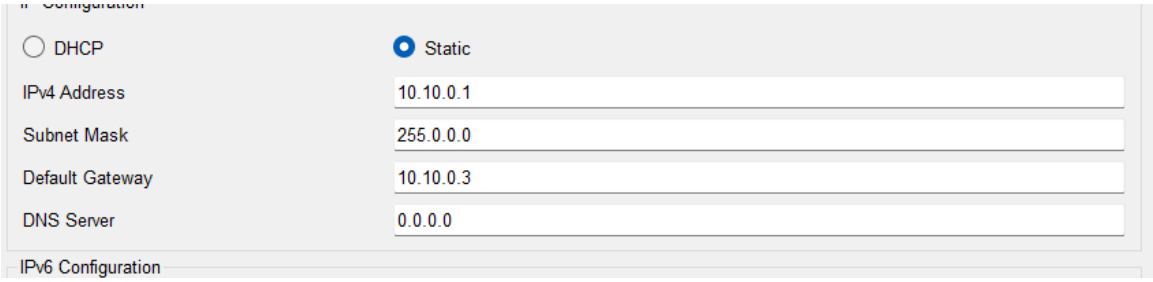
1. **Make a small network with a few PCs, one web server, a switch, and a router (just to give an idea of how to assign a default gateway). Make sure that all the devices are connected (use straight-through cables as we are connecting different devices). Create a web page that should contain your name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

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

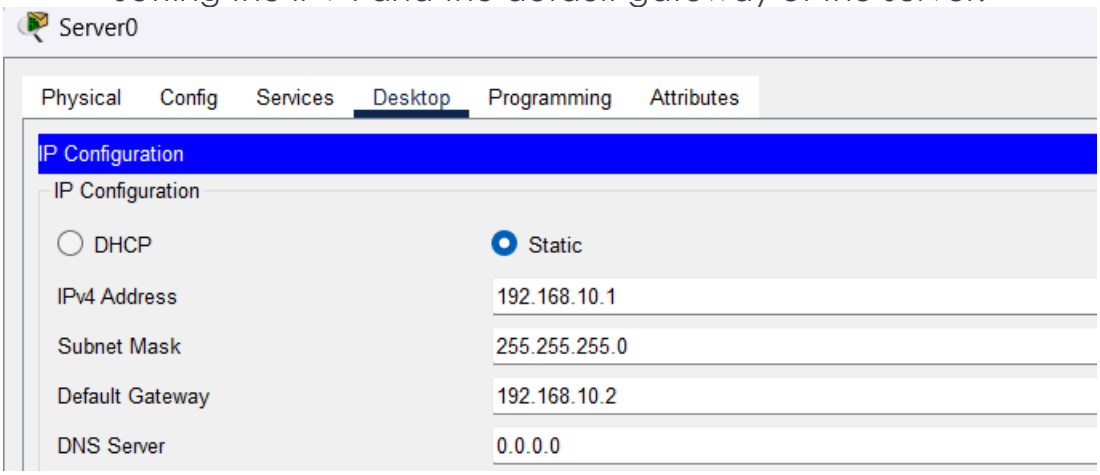
Diagram of the connection:



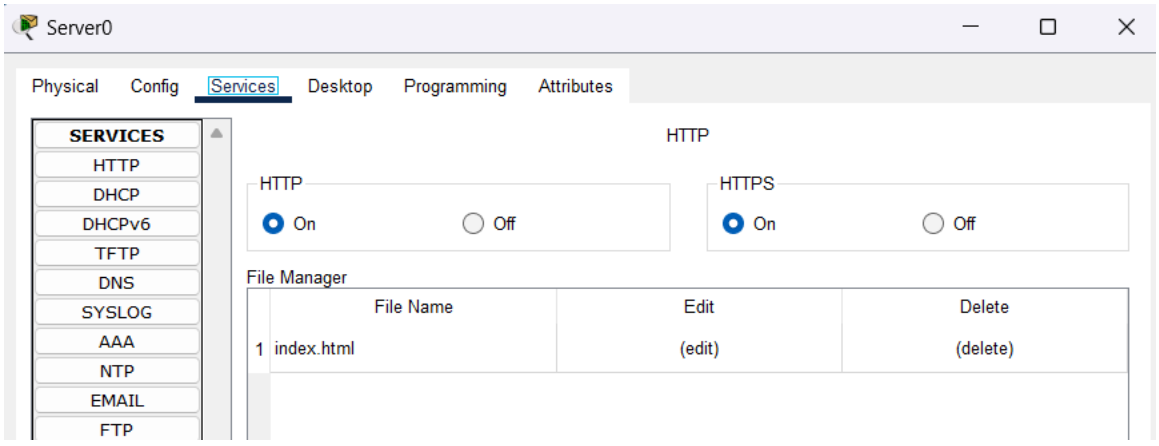

Setting the IPV4 of the PCs, and the default gateway of the PCs as well:

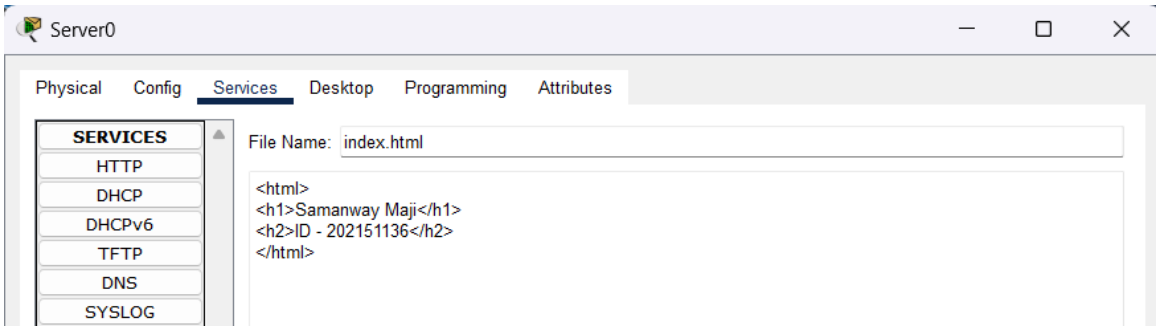


Setting the IPV4 and the default gateway of the server:

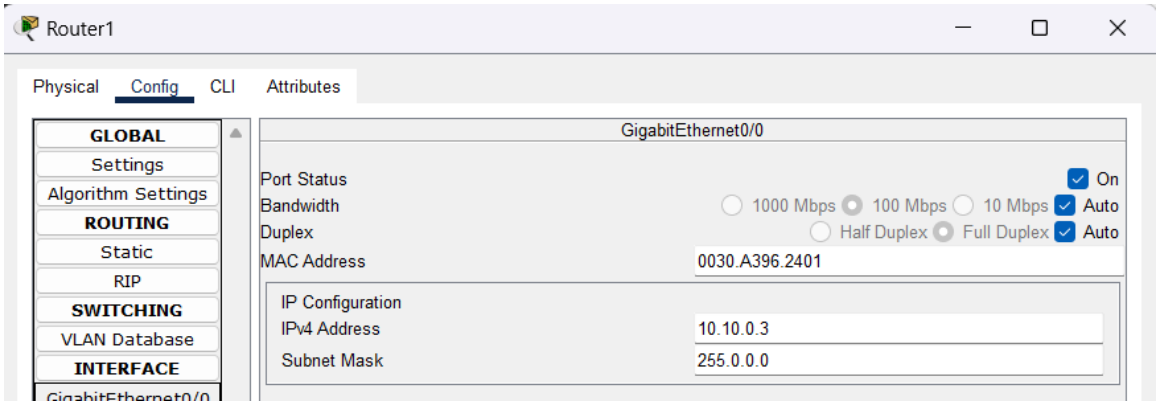


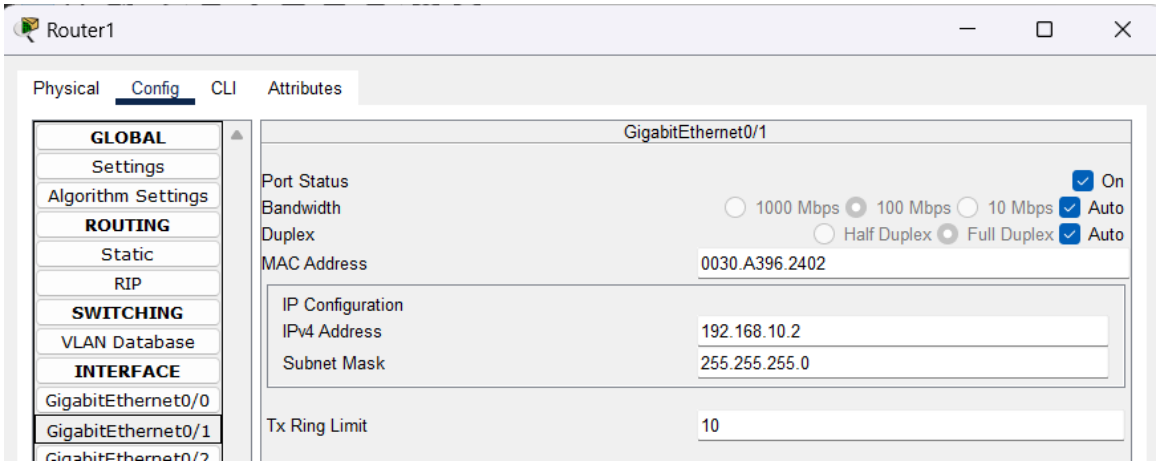

Enabling the http and the https services in the server, as well as designing the webpage:



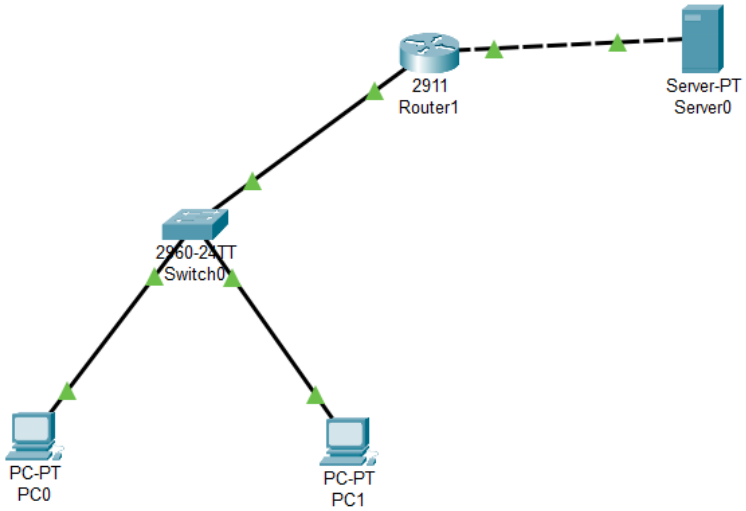



Setting the Gigabit Ethernet 0/0 and 0/1 ports for connecting the PC and the router.

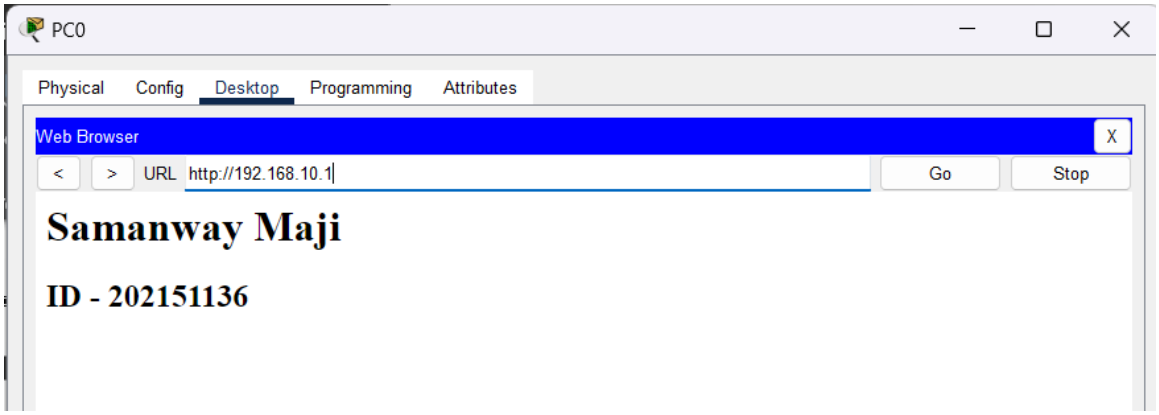



Connection Established, shown by green mark:



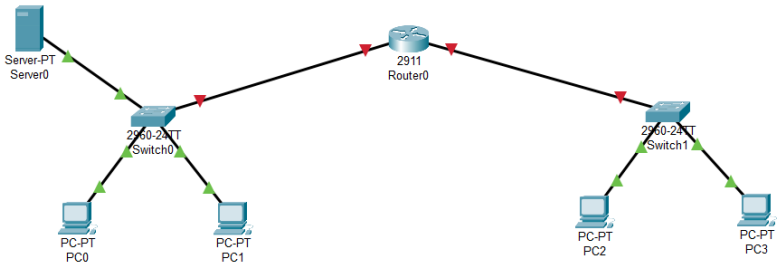
The IPV4 of the server is put in a browser of the PC, which shows the webpage that was designed:



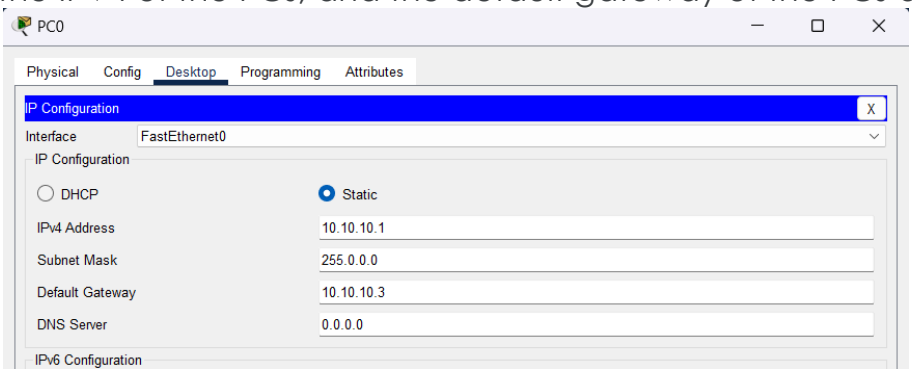
2. **Make a complex network having at least two different network addresses. You can use many PCs, switches, and routers. Again, create a web page through a Server. Note that this time the PC used to display the web page should be connected to another network address than a web server.**

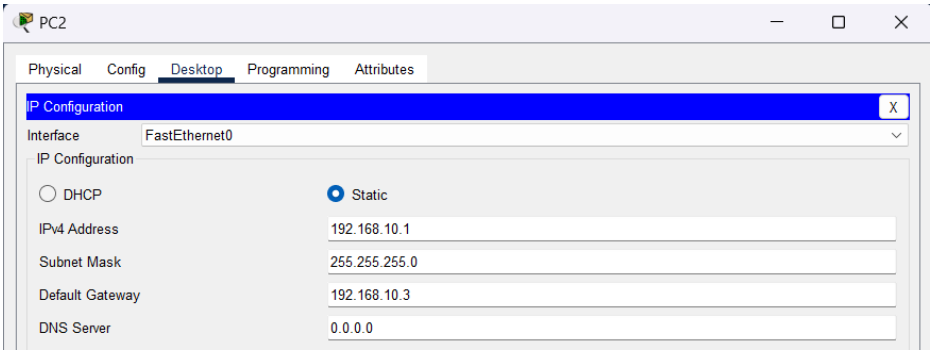
Components: End devices (PC), Switch (2960), Router (2911), Server (Server-PT).

Diagram of the connection:



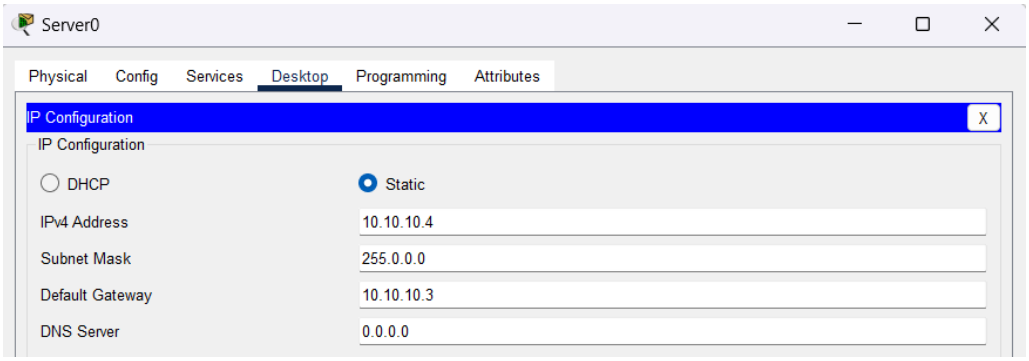

Setting the IPV4 of the PCs, and the default gateway of the PCs as well:



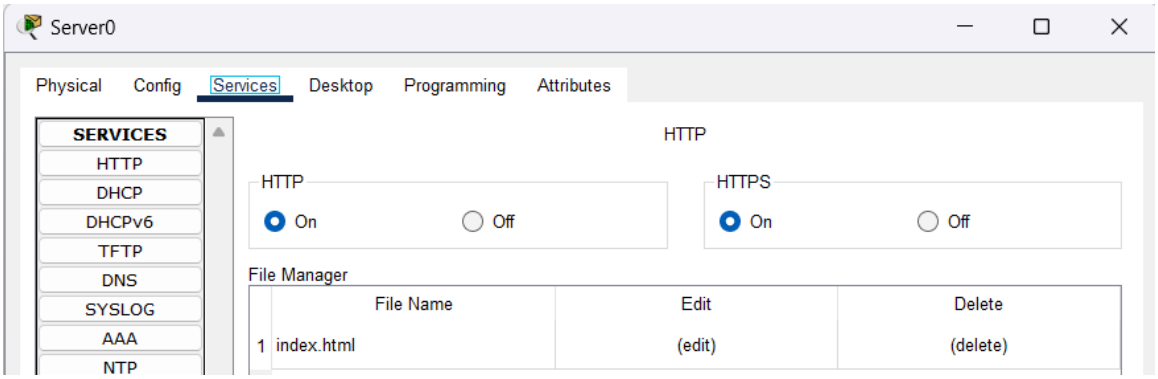



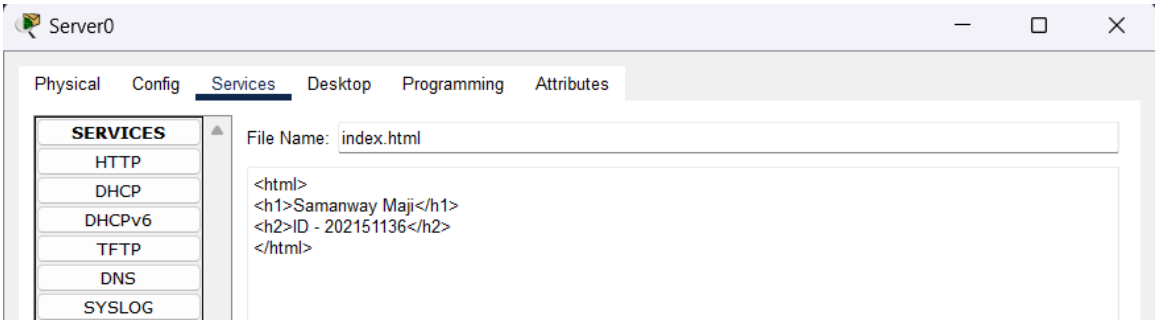

Note PC0 and PC2 are in separate networks, denoted by the different subnet mask.

Setting the IPV4 and the default gateway of the server:

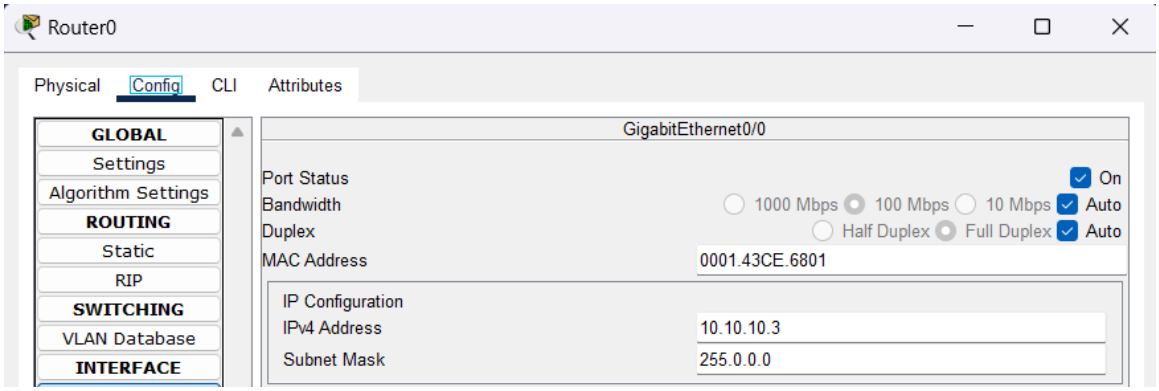


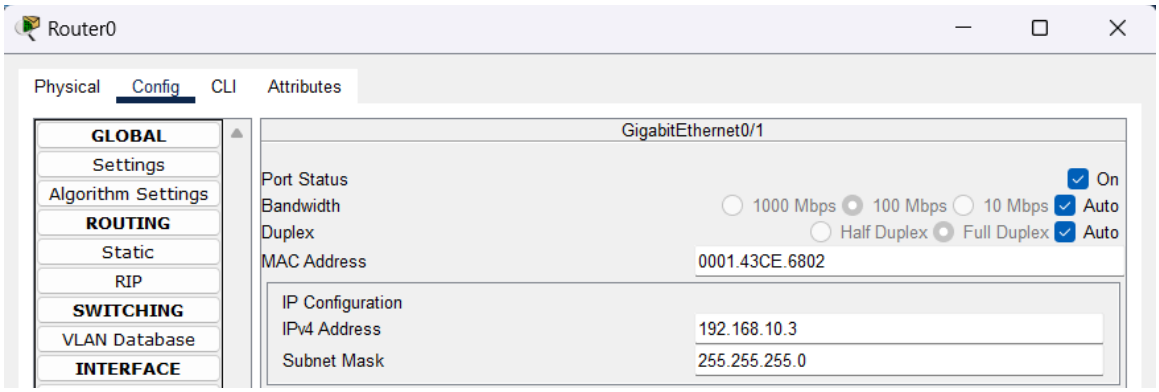

Enabling the http and the https services in the server, as well as designing the webpage:



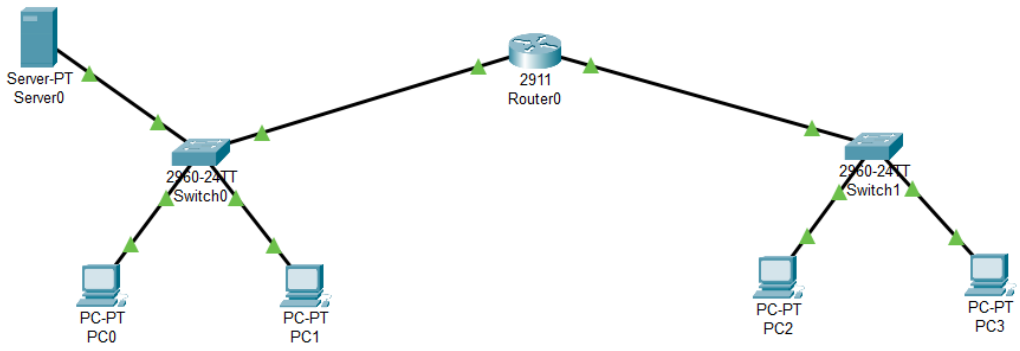



Setting the Gigabit Ethernet 0/0 and 0/1 ports for connecting the PC and the router.




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: