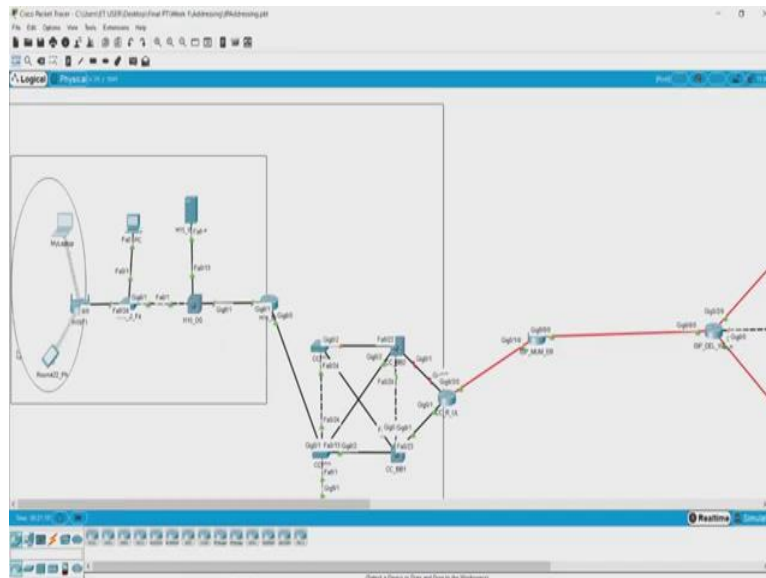


**Demystifying Networking**  
**Prof. Sridhar Iyer**  
**Department of Computer Science and Engineering**  
**Indian Institute of Technology, Bombay**

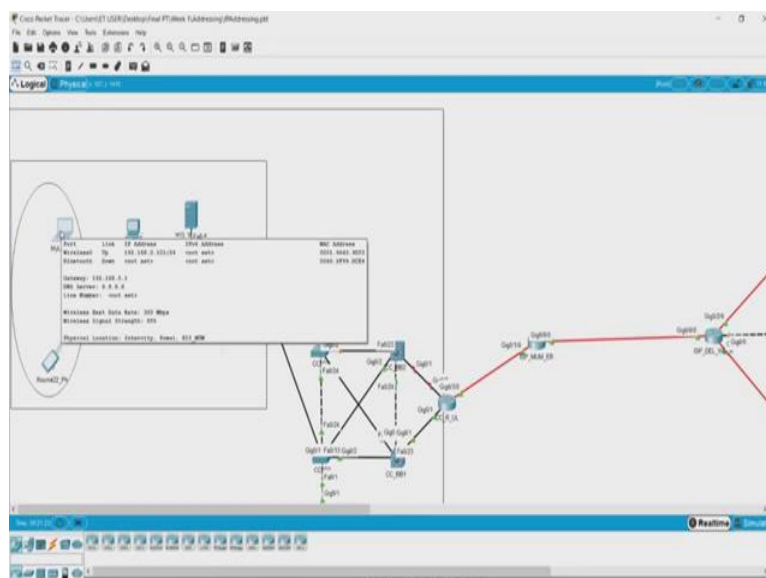
**Lecture - 33**  
**Verifying Connectivity using Ping**

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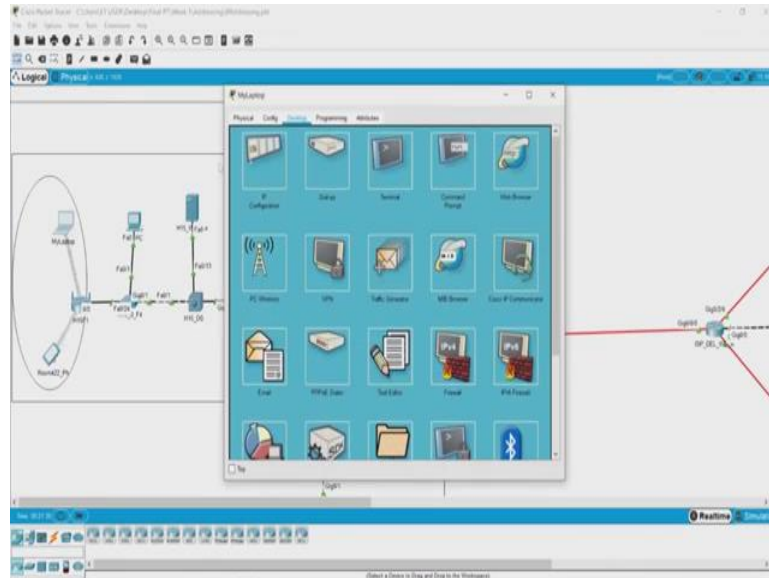
Now, one of the ways of checking whether two devices are connected in the same network or not, there is something called, a command called 'ping'.

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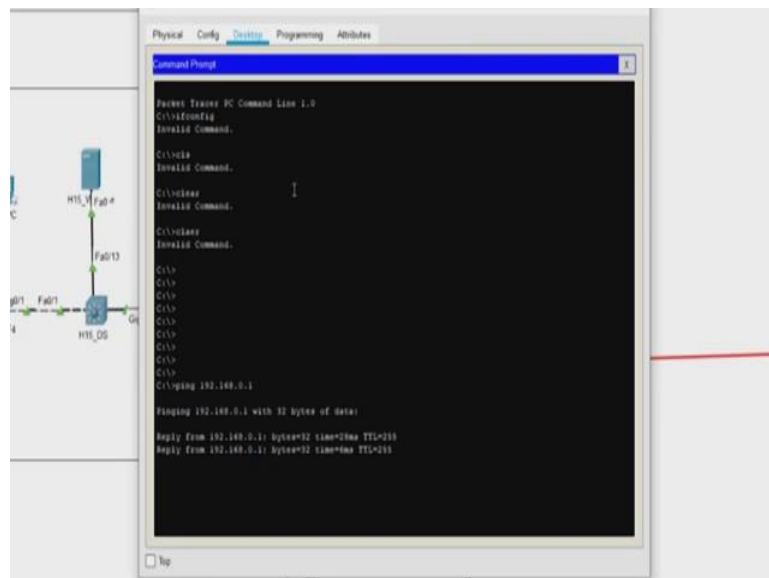


So, the IP address of this device or this laptop that is connected is 192.168.0.101, which we can see here.

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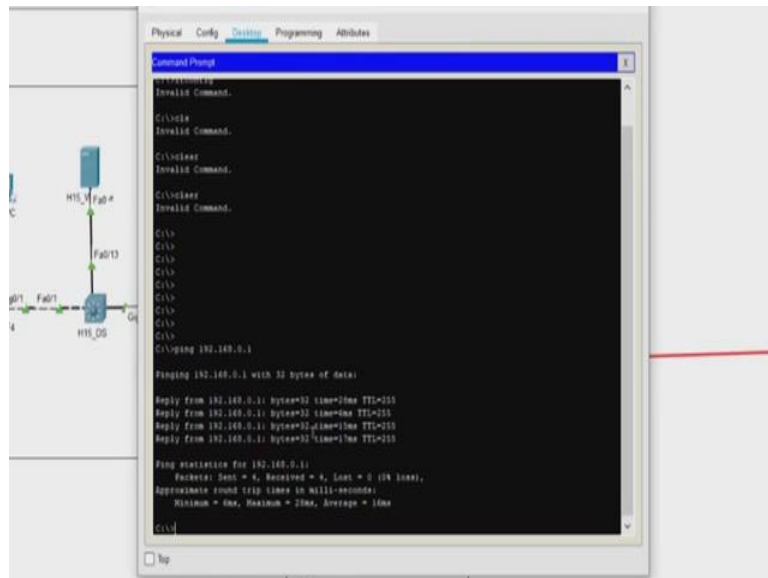


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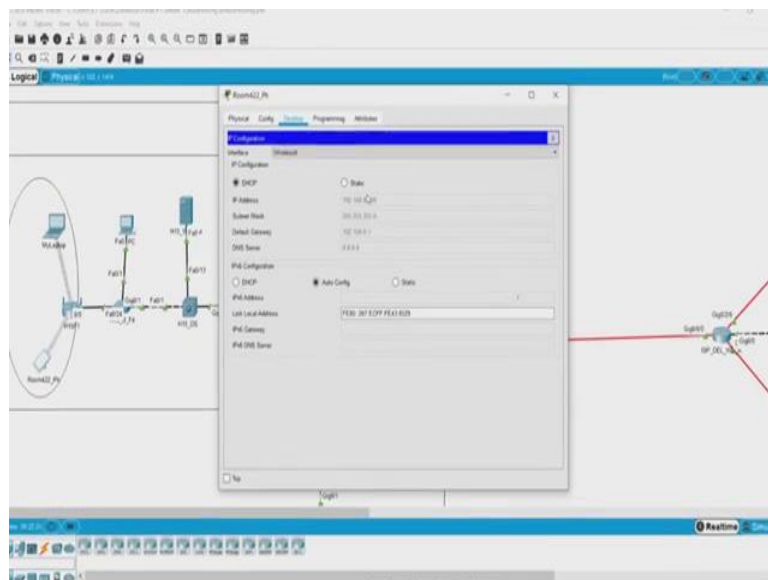
Now, if we open this laptop and go to the command prompt, and over here type the command 'ping 192.168.0.1' which was the IP address of the gateway and hit 'enter', it tells us, reply from this, bytes this, time of returning message and time to leave of the packet.

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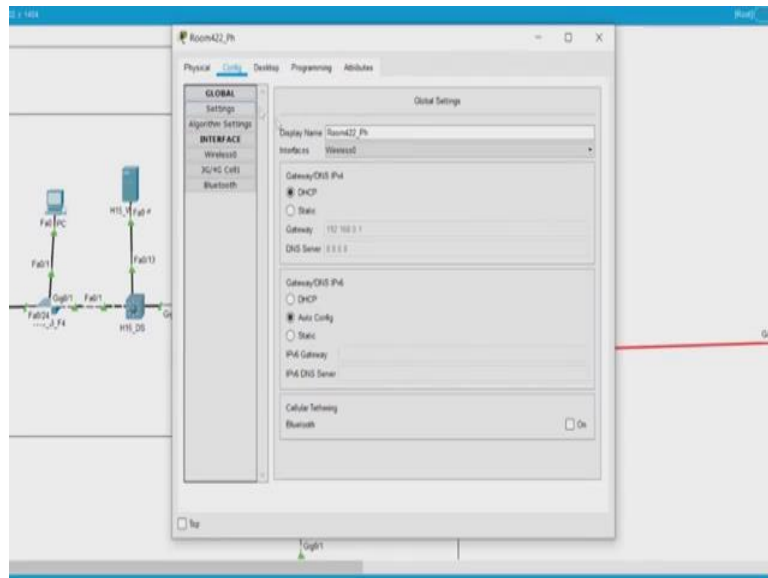


Now, this determines that this laptop was able to communicate with the gateway and returned with the success, which says sent 4 received 4 lost 0. Now, if you were to look at this particular device which is also connected in the same network, this has the IP address of 100.

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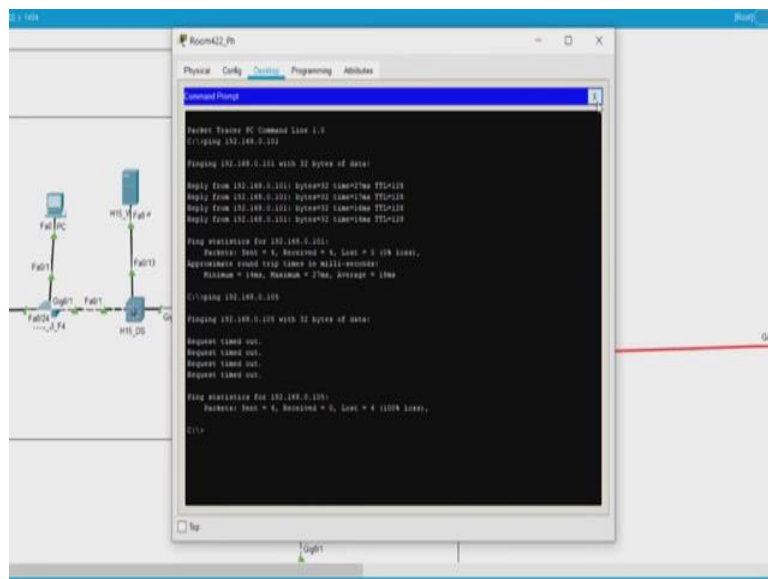


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Now, let us try to ping from this device to the laptop.

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So, we close this, go back to command prompt, type 'ping 192.168.0.101', which was the laptop. Here again, we see we are able to ping successfully. Now, let us try to ping an address which is not there on network.

Let us say this one 105. So, as soon as we hit 'enter', it takes a while, it basically is waiting for the ping to return and until one time out if there is no reply from the device, it basically says

request timed out, that means, there is no connection or successful connection between two devices. So, this is one of the ways you could check if two devices are connected over a network or not. Now let us close this.