 **Course Code: BCSE353E**

**Course Name: Information Security Analysis and Audit**

**Assessment – 1**

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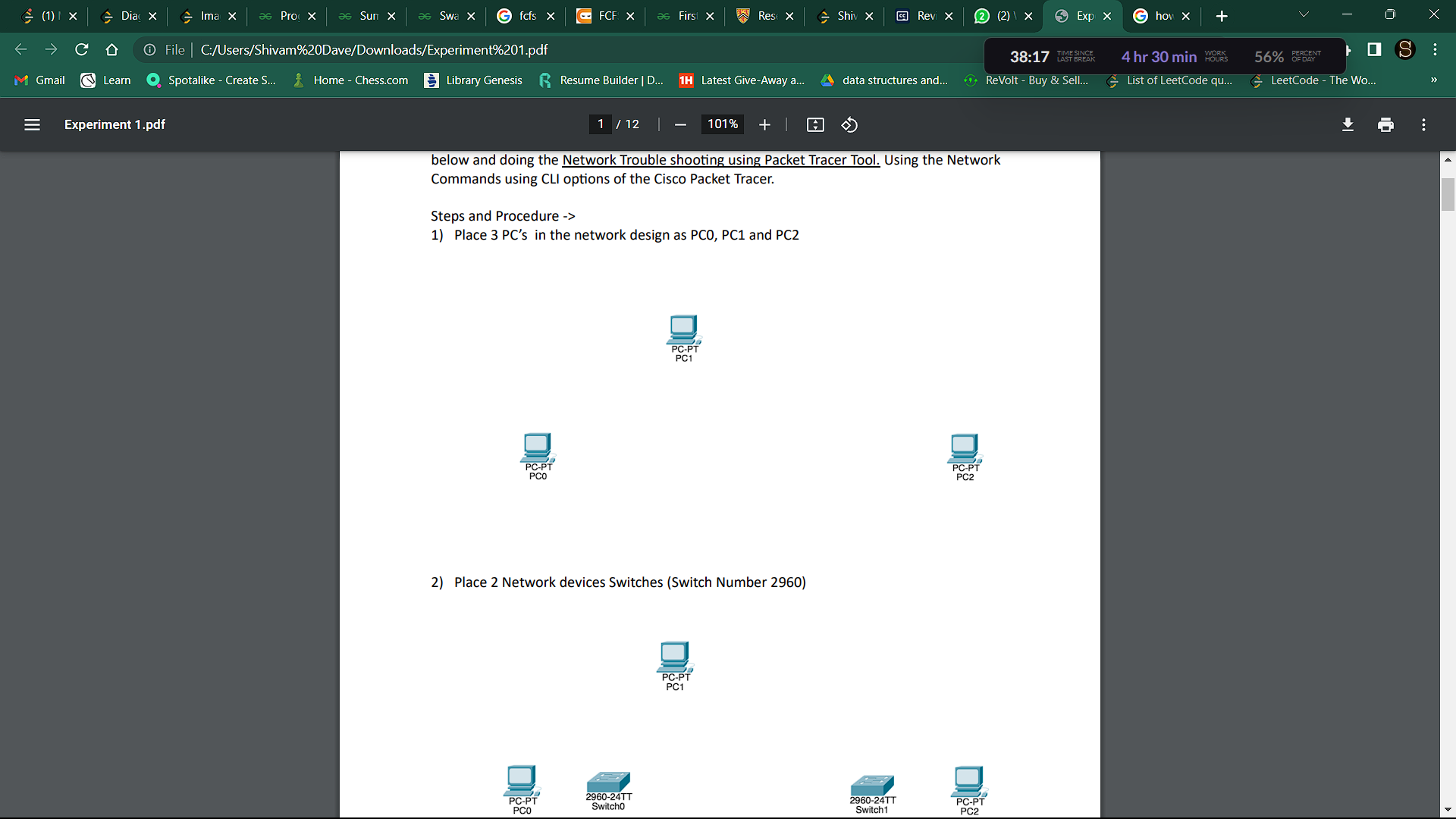
**Reg. No.: 21BCB0107**

**Experiment 1: -**

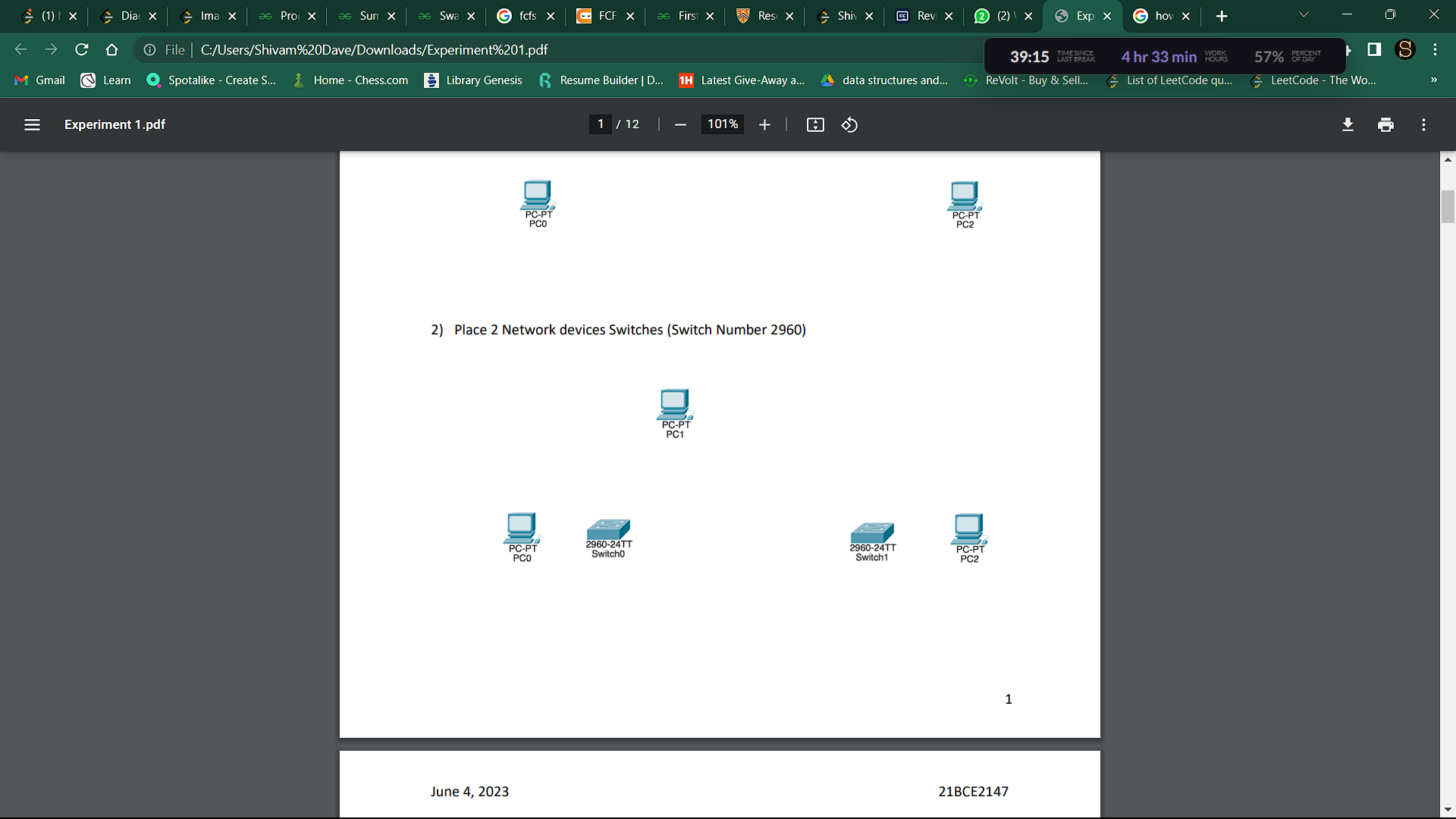
**Designing a Network with 3 Desktop, 3 switches (2960) and 3 Routers (2811) as shown below and do the Network Trouble shooting using Packet Tracer Tool. Use the Network Commands using CLI options of the Cisco Packet Tracer.**

**Steps:**

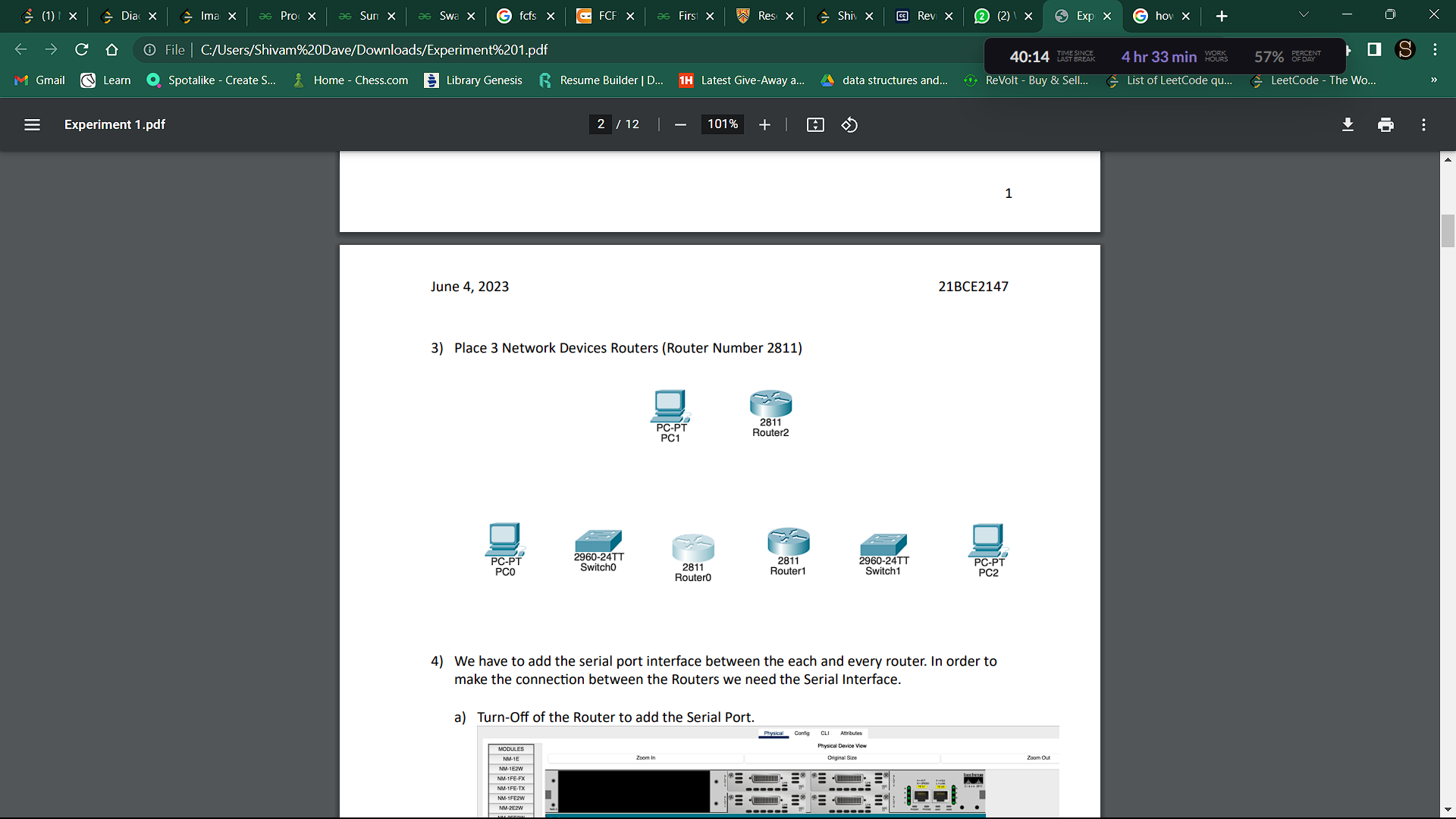
1. First, we set up 3 PC PT 3 2811 and 2 2960-24TT routers as shown below



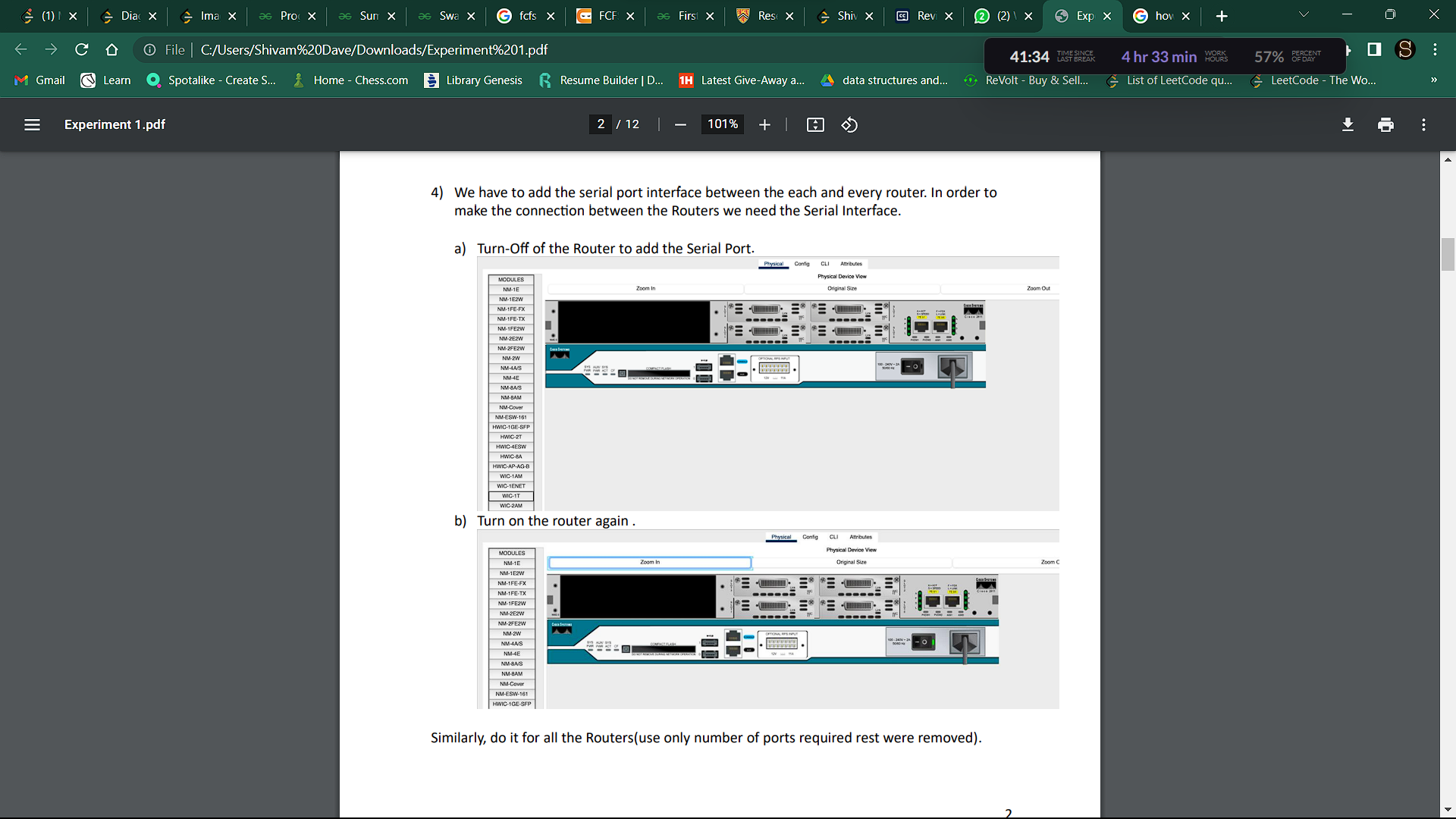
1. We connect with 2 network device Switches(Switch Number 2960)



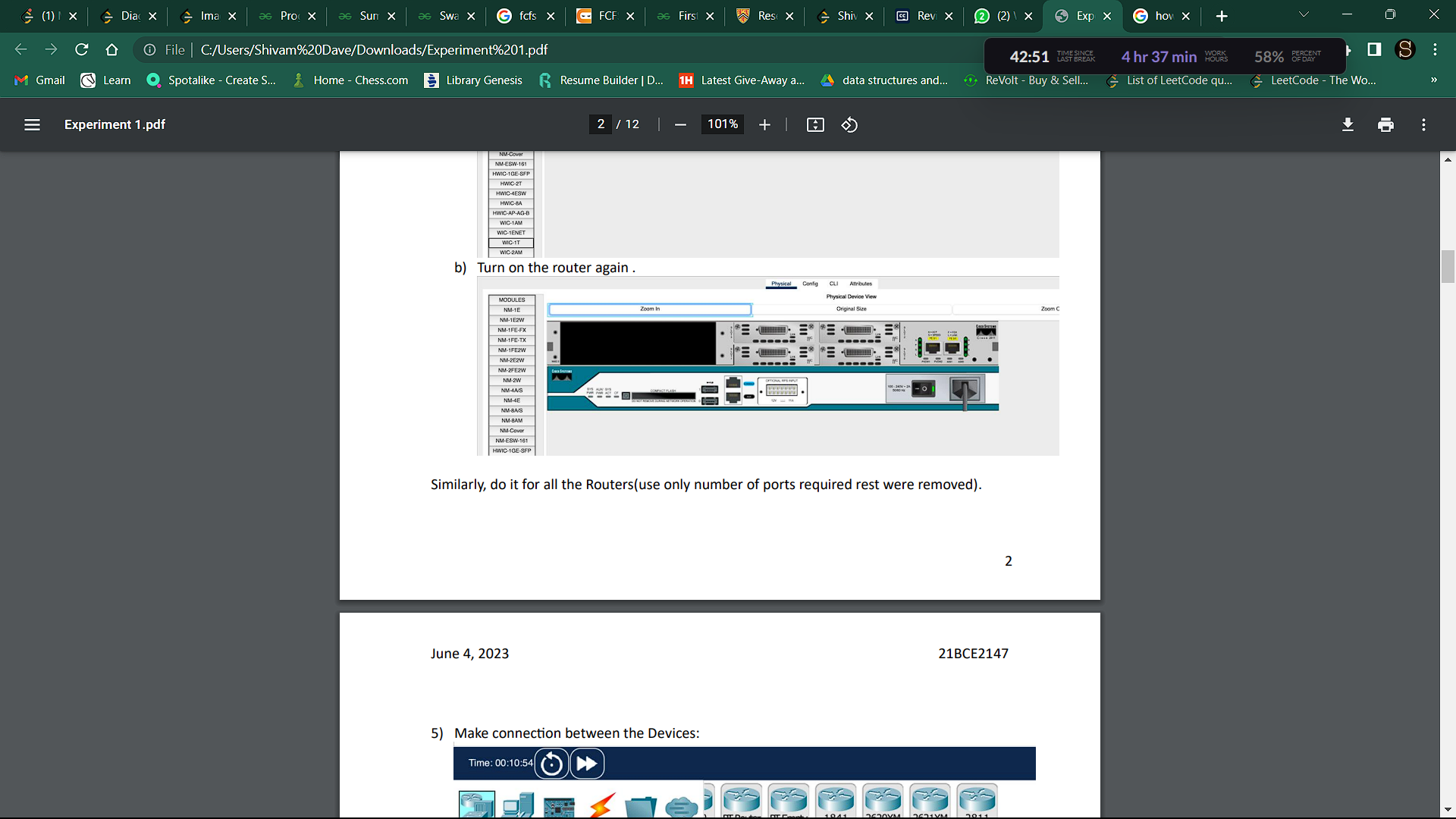
1. We place 3 routers (Router number 2811)

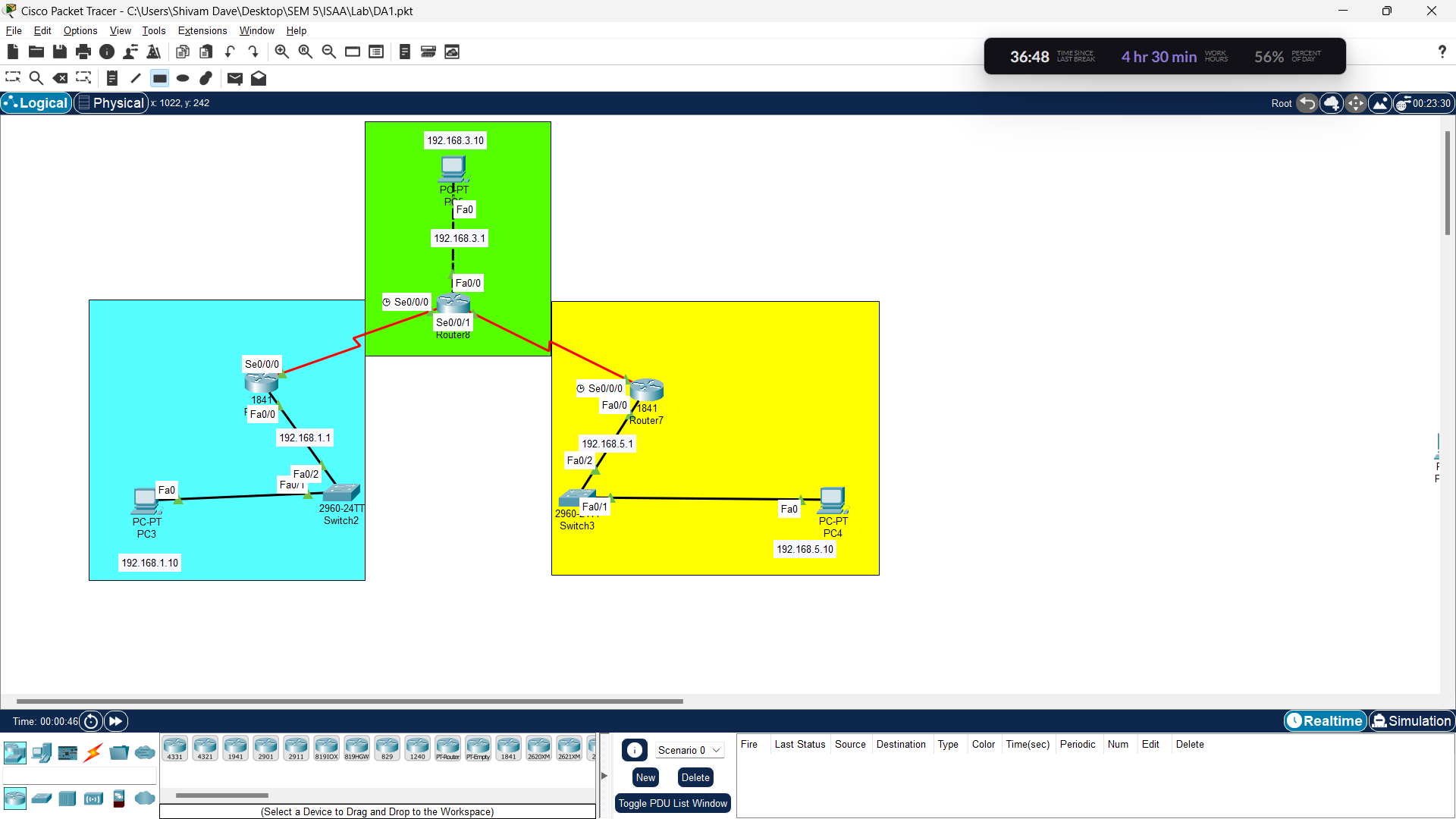


1. We need to make sure to add serial port interface to the given routers. It involves the following steps:
   1. Turn off the router to add serial port



* 1. Turn on the router again.

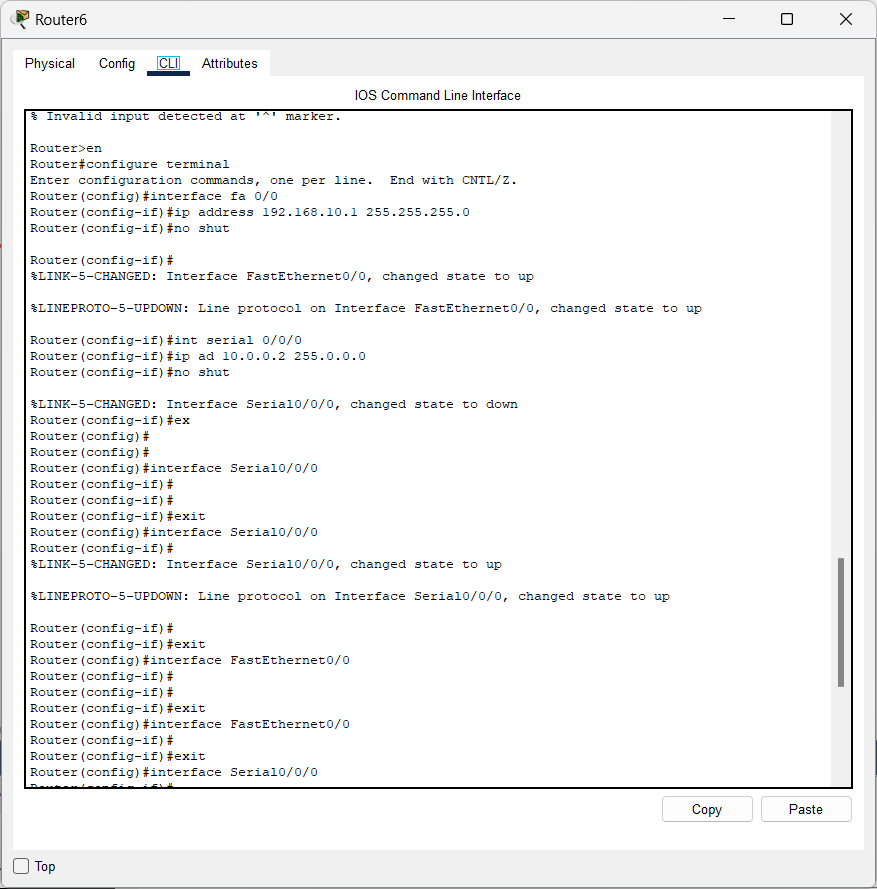


1. Make correct wire connections with each end device, network device and router as shown.
2. We finally create our circuit as follows: 

1. We configure the IP addresses of each PC

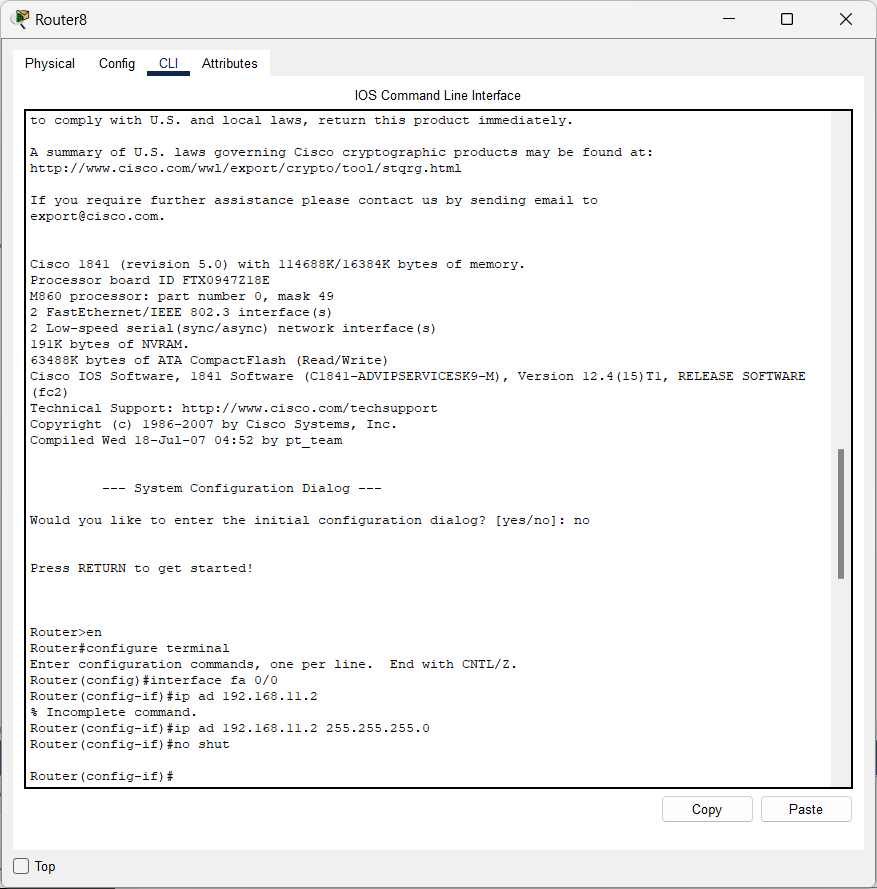
**For Router 1:**

CLI commands are as follows:



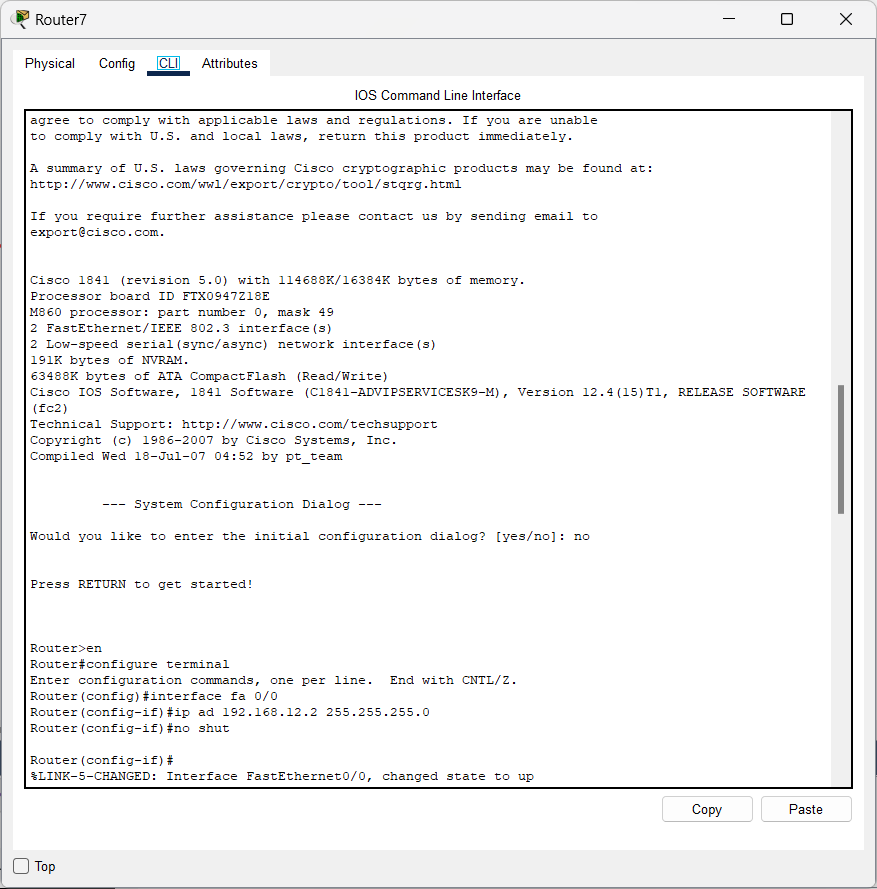
**For router 2:**

CLI commands are as follows:

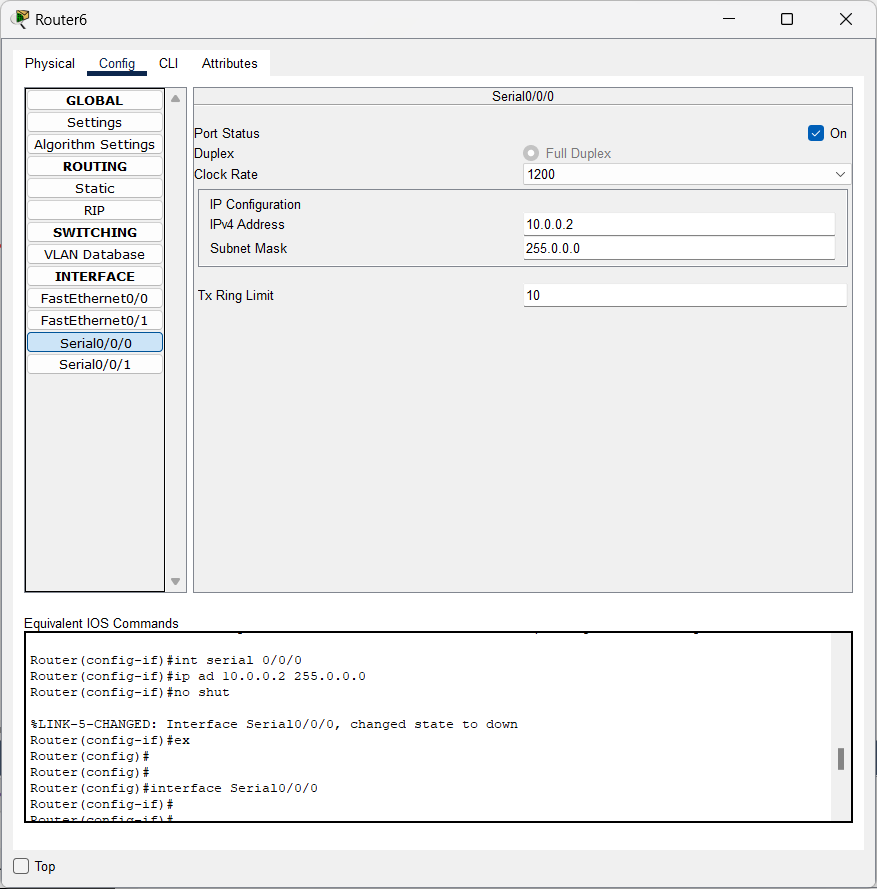


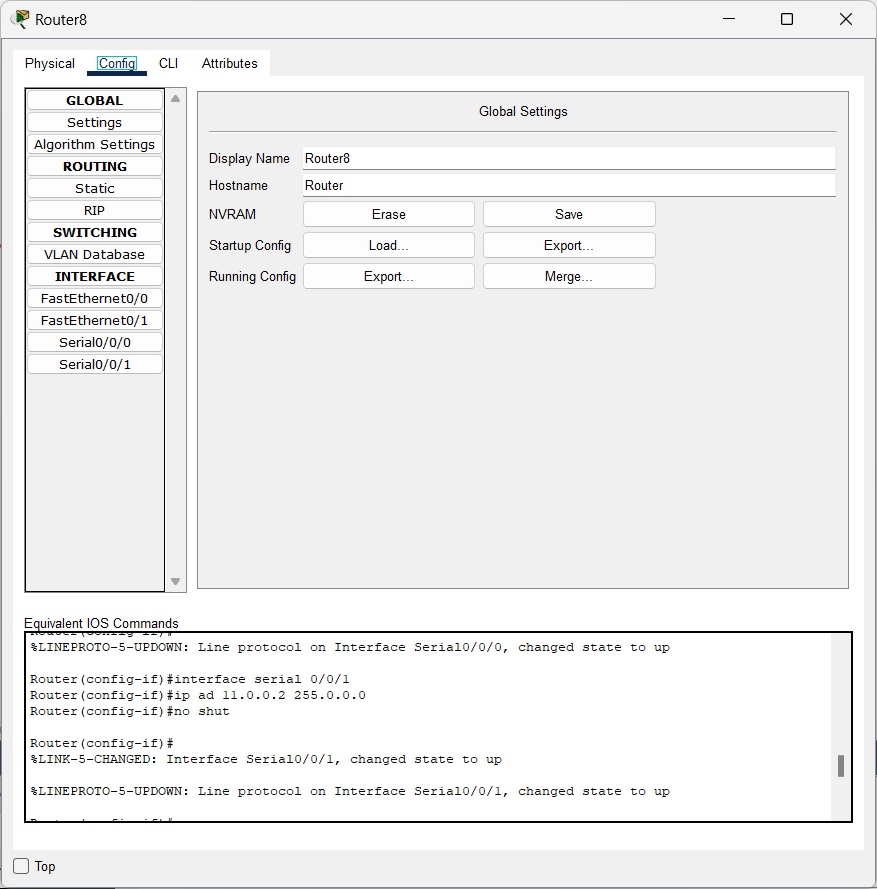
**For Router 3:**

IP V.4 Address is set as 13.10.10.10 for the PC-3 and default Gateway is set as 13.10.10.1

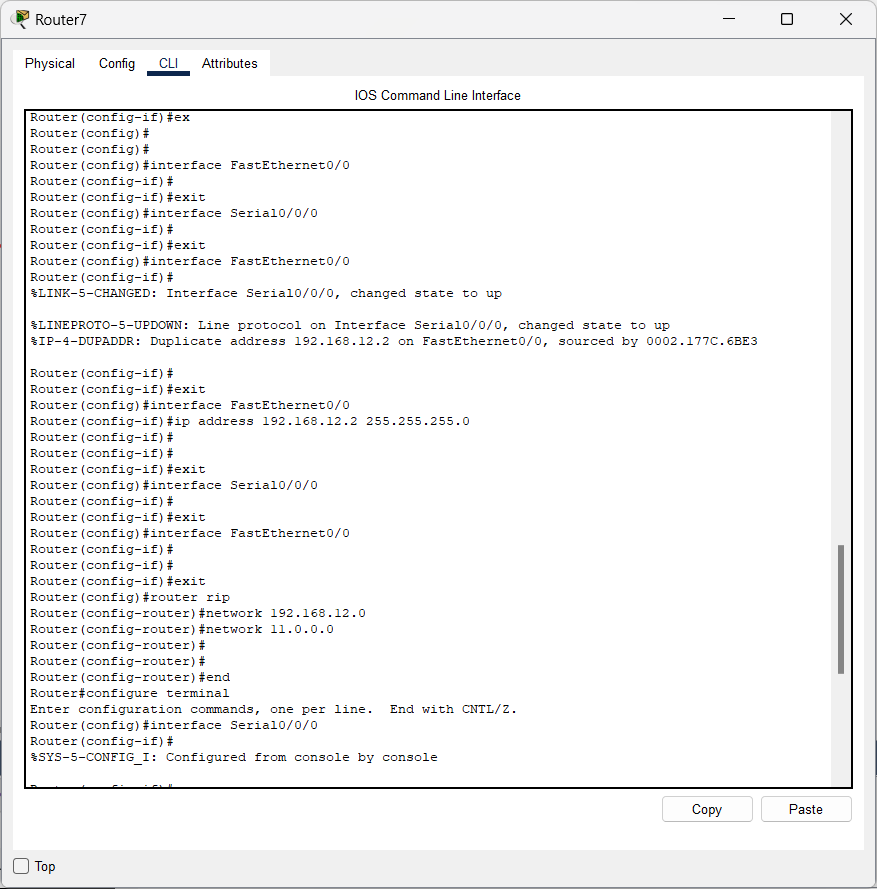


1. We configure the IP V.4 address of each router as follows:

**Router 1:**

**Router 2:**

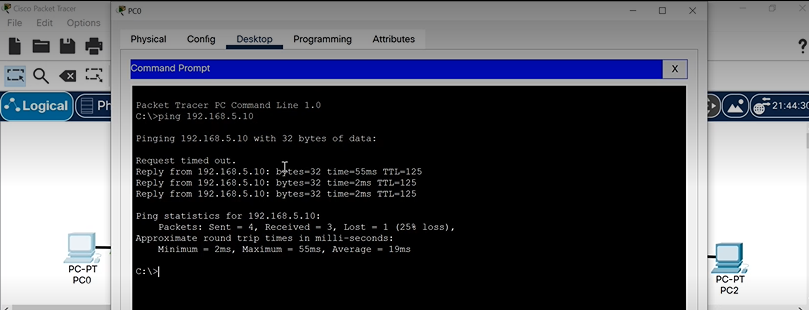
**Router 3:**

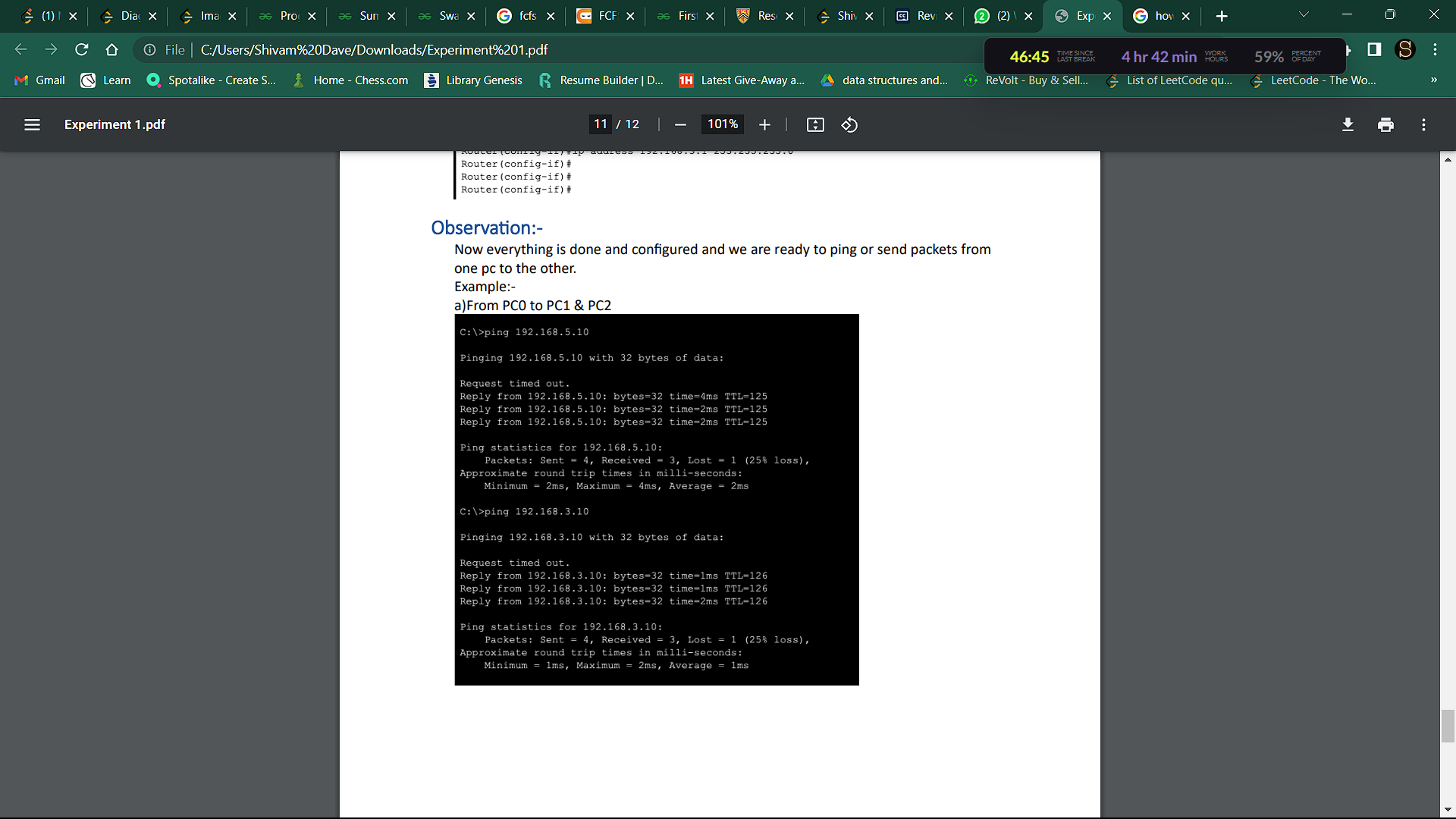


**Observation and results:**

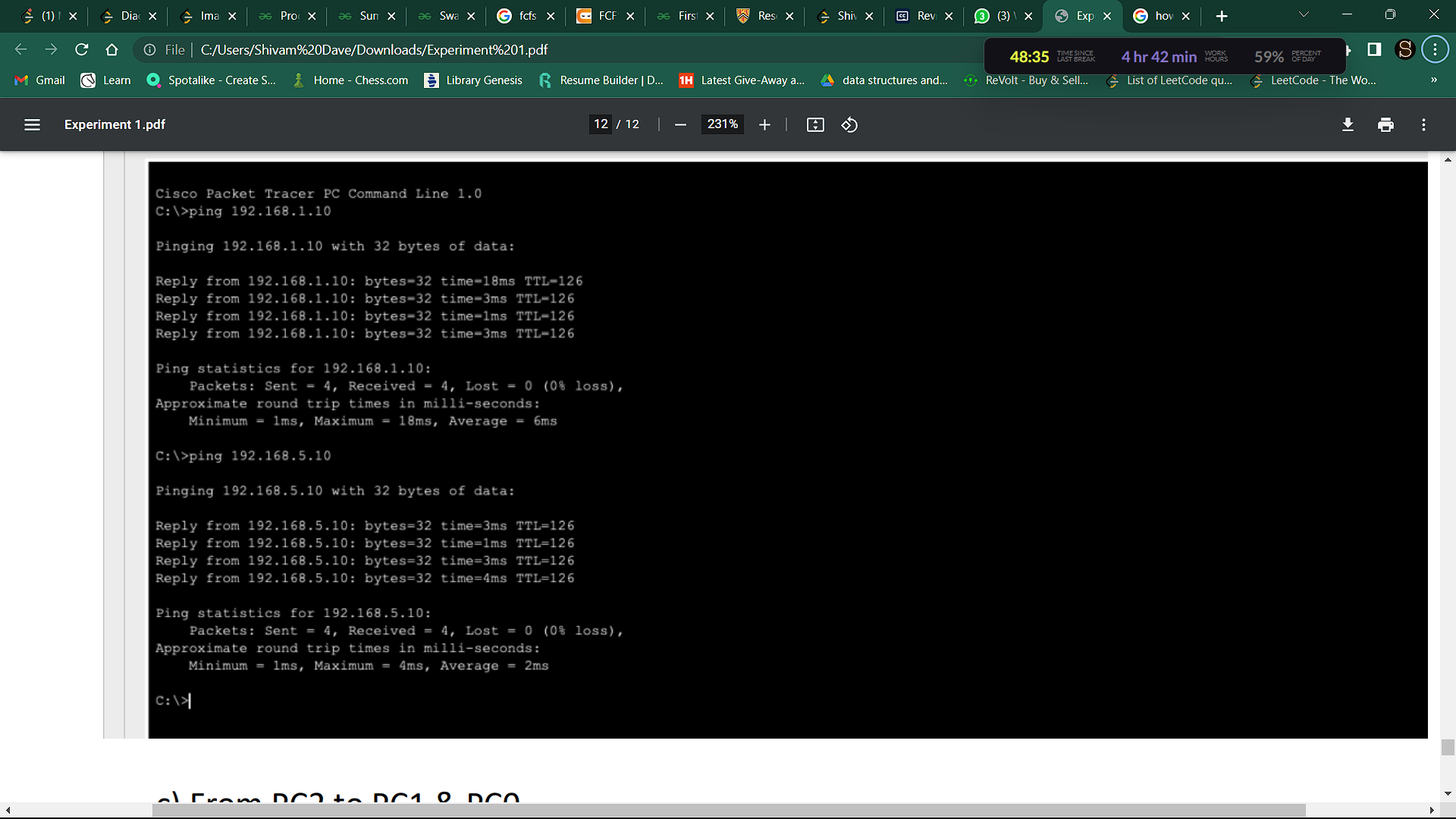
Finally, after configuring everything. We use the Ping command to transmit data in form of Packets.

1. From PC0 to PC1 & PC2





1. From PC1 to PC0 and PC2



c) From PC2 to PC1 & PC0