

Computer Networks Lab 04

Course: Computer Networks (CL3001)

Instructor: Sadaf Zehra

Semester: Fall 2025

T.A: N/A

Note:

- Maintain discipline during the lab.
 - Listen and follow the instructions as they are given.
 - Just raise hand if you have any problem.
 - Completing all tasks of each lab is compulsory.
 - Get your lab checked at the end of the session.
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Lab Objective

- Implementation & understanding of HTTP/HTTPS.
- Introduction to DNS & configuration of DNS in Cisco Packet Tracer.

Computer Networks

CL3001

LAB - 04

HTTP/HTTPS, DNS, Wireshark

NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES,
KARACHI CAMPUS
FAST SCHOOL OF COMPUTING (AI & DS, CS, CY, SE)
SPRING 2025

Lab Exercises

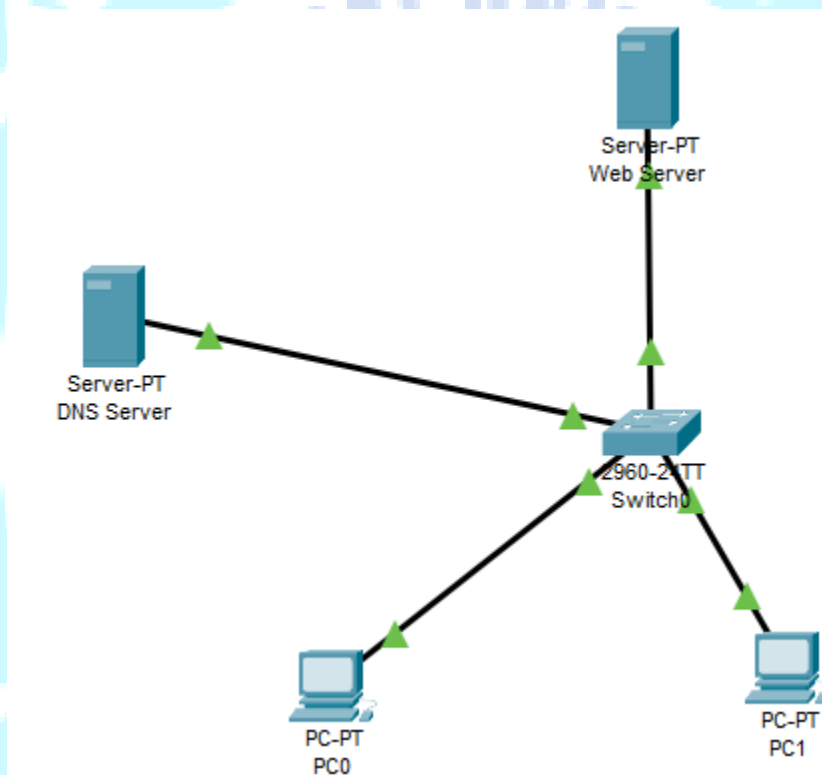
Note:

Server and PC name have roll no.

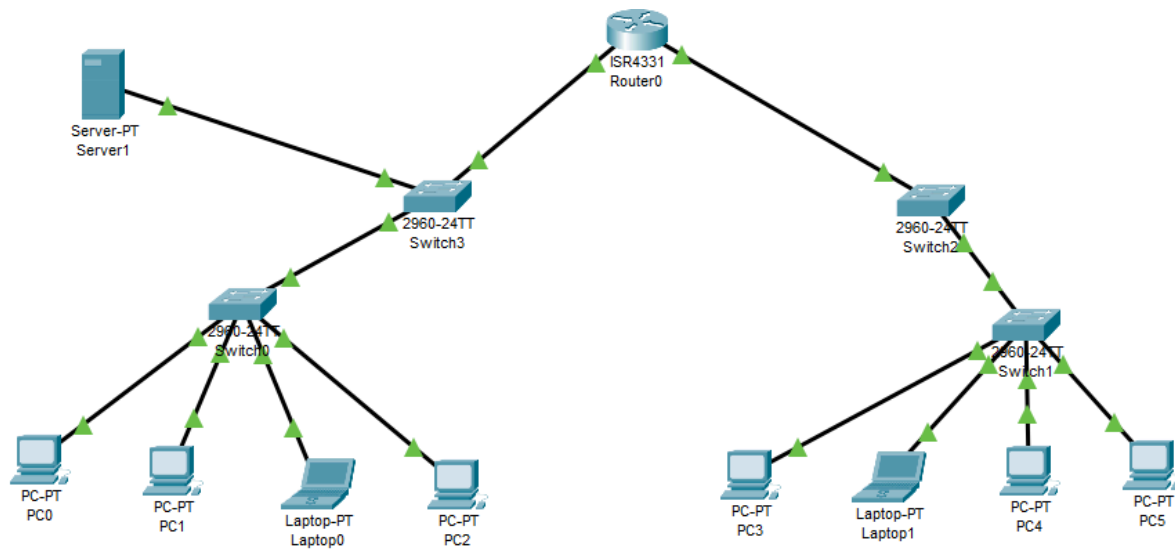
Example:

Server22K0001

1. Create the following network with a DHCP server. Send DNS packets to your network. Attach a snapshot of each step.



2. Implement the given topology. Add some web servers to your network. Implement DNS & add records of your web servers. Attach a snapshot of each step.



3. Which HTTP header sets a "best before" date for cached items?
4. HTTP PUT and POST methods are different or not? Explain the reason in one line.

Wireshark Lab Exercise

1. Follow the **Wireshark HTTP Analysis** steps for HTTPS. Take a Snapshot of each Step, and Explain in a one-line answer, what do you understand here?
2. Apply the following filters. Attach a snapshot of each step.
 1. Tcp
 2. Udp
 3. IP address equal to