

# AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

### **FACULTY OF SCIENCE & TECHNOLOGY**

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**Computer Network** 

Spring 2024-2025

Section: D

FINALTERM LAB TASKS

### Supervised By

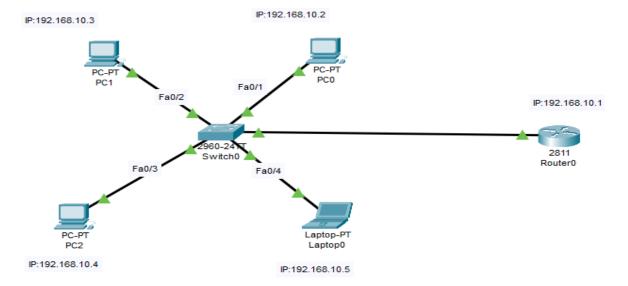
Dr. Rajarshi Roy Chowdhury

## Submitted By

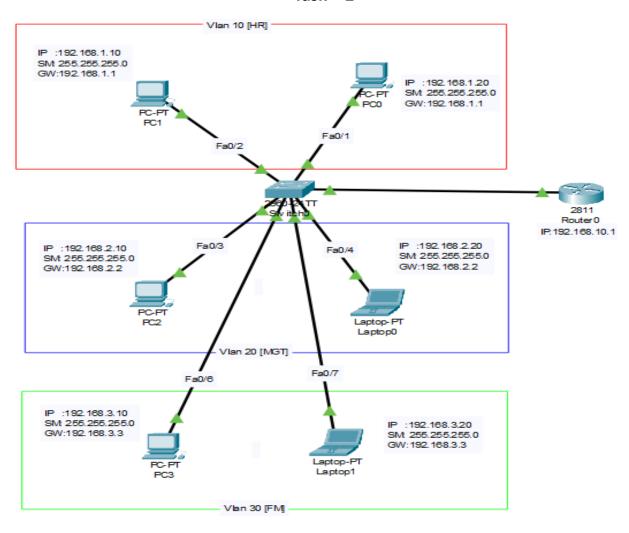
Name	ID
Fatema Akter Tripty	22-46989-1

Date of Submission: May 26, 2025

Task - 1

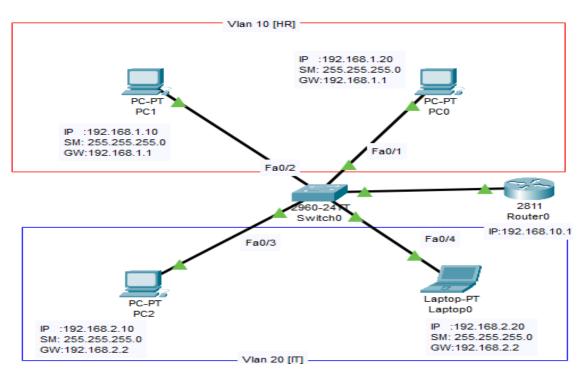


Task – 2



ROUTER CONFIGURATION SWITCH CONFIGURATION Router>en 9w itch>enable Router#confit 9w itch#config terminal Enter configuration commands, one per line. End with CNTL/Z. Enter configuration commands, one per line. End with CNTL/Z. Router(config)#int fa0/0 Sw itch(config)#vlan 10 Router(config-if)#no shutdow n Sw itch(config-vlan)#name HR Router(config-if)#int fa0/0.10 Sw itch(config-vlan)#vlan 20 Router(config-subif)# 9w itch(config-vlan)#name MGT %LNK-5-CHANGED: Interface FastEthernet0/0.10, changed state to up 9w itch(config-vlan)# Sw itch(config-vlan)#int fa0/2 %LNEFROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.10, changed state to up Switch(config-if)#switchport mode access 9w itch(config-if)#sw itchport access vlan 10 Router(config-subif)#encapsulation dot1q 10 Sw itch(config-if)#int fa0/1 Router(config-subif)#ip add 192.168.1.1 255.255.255.0 Switch(config-if)#switchport mode access Router (config-subif)#int fa0/0.20 Switch(config-if)#switchport access vlan 10 Router(config-subif)# Sw itch(config-if)# %LNK-5-CHANGED: Interface FastEthernet0/0.20, changed state to up Sw itch(config-if)#int fa0/3 Switch(config-if)#switchport mode access %LNEFROTO-5-UFDOWN: Line protocol on Interface FastEthernet0/0.20, changed state to up Switch(config-if)#switchport access vlan 20 Sw itch(config-if)#int fa0/4 Router(config-subif)#encapsulation dot1q 20 Switch(config-if)#switchport mode access Router(config-subif)#ip add 192.168.2.2.255.255.255.0 Switch(config-if)#switchport access vlan 20 Router(config-subif)# 9w itch(config-if)# Router# 9w itch(config-if)#int fa0/5 Router>en Switch(config-if)#switchport mode trunk Router#conf t 9w tch>enable Enter configuration commands, one per line. End with CNTL/Z. Switch#configiterminal Router(config)#int fa0/0 Enter configuration commands, one per line. End with CNTL/Z. Router(config-f)#no shutdown Switch(config)#vlan 30 Router(config-f)#int fa0/0.30 Switch(config-vlan)#name FM Router(config-subif)# Sw tch(config-vlan)#int fa0/6 %LINK-5-CHANGED: Interface FastEthernet0/0.30, changed state to up Switch(config-if)#switchport mode access 9w tch(config-if)#sw itchport access vlan 30 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0.0.30, changed state to up Sw tch(config-if)#int fa0/7 Switch(config-if)#switchport mode access Router(config-subif)#encapsulation dot1q 30 Switch(config-if)#switchport access vlan 30 Router(config-subif)#ip

#### Task - 3



Switch>enable Switch#config terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#vlan 10 Switch(config-vlan)#name HR Switch(config-vlan)#vlan 20 Switch(config-vlan)#name MGT Switch(config-vlan)#

Switch(config-vlan)# Switch(config-vlan)#int fa0/2

Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 10

Switch(config-if)#int fa0/1

Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 10

Switch(config-if)# Switch(config-if)#int fa0/3

Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 20

Switch(config-if)#int fa0/4

Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 20

Switch(config-if)#

Switch(config-if)#int fa0/5

Switch(config-if)#switchport mode trunk

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#int fa0/0 Router(config-if)#no shutdown Router(config-if)#int fa0/0.10

Router(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.10, changed state to up

Router(config-subif)#encapsulation dot1q 10

Router(config-subif)#ip add 192.168.1.1 255.255.255.0

Router(config-subif)#int fa0/0.20

Router(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.20, changed state to up

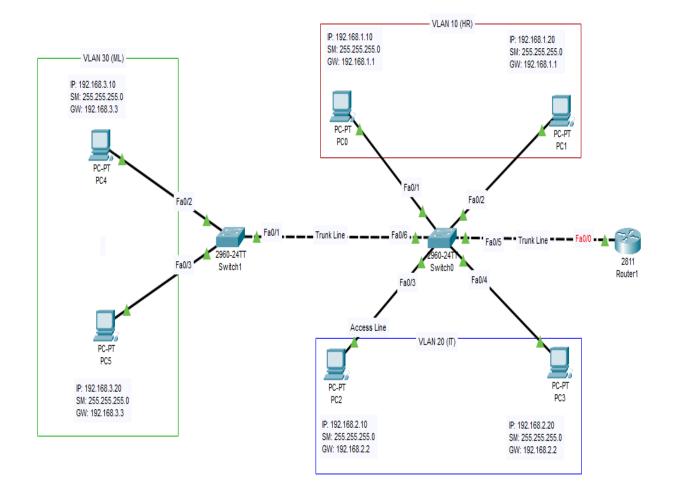
Router(config-subif)#encapsulation dot1q 20

Router(config-subif)#ip add 192.168.2.2 255.255.255.0

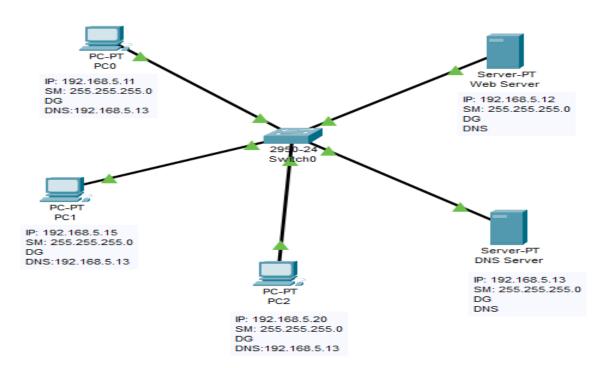
Router(config-subif)#

Router#

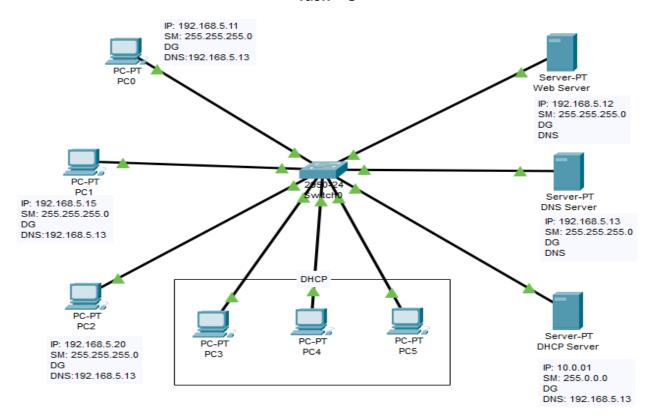
#### Task - 4



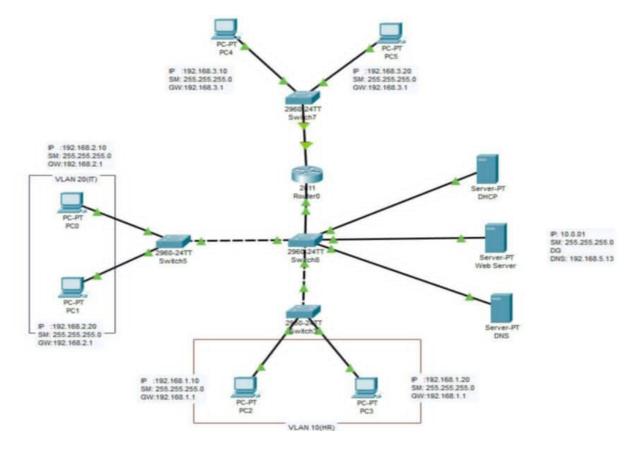
Task - 4



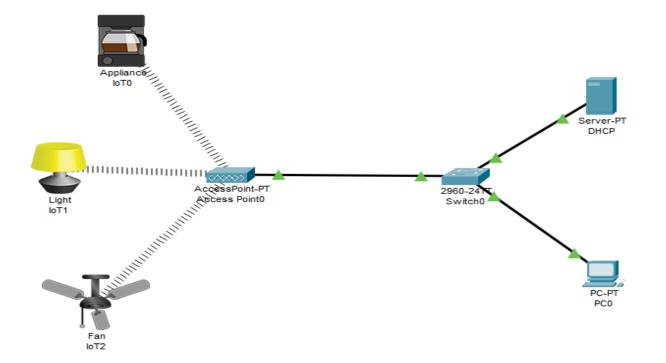
**Task** – **5** 



Task – 6



Task – 7



Task – 8

