

Computer Network Laboratory ENCS4130

TODO 1: Subnetting, Router Configuration and Static Routing

Question 1: Given the following topology, divide the given class C address 192.168.1.0/24 range on the networks A, B, C, D, E using minimum number of IPs.

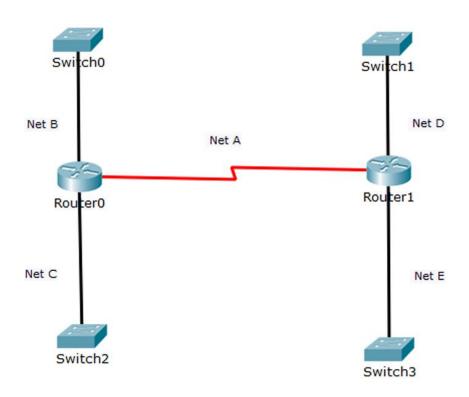
Net A = 2

Net E = 5

B, C and D represent the last six digits of your university ID.

For example: if your university ID 1170302

1170302						
1	17	03	02			
Not Use	В	С	D			
	Net B Host	Net C Host	Net D Host			

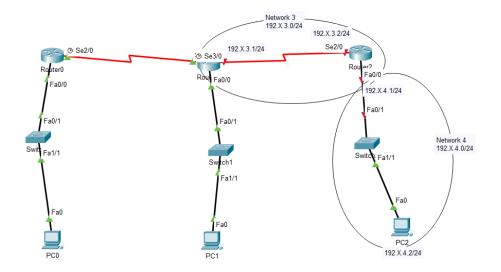


Do the following:

- **1.** Divide the given class C address 192.168.1.0/24 range on the networks A, B, C, D, E using minimum number of IPs (You must show all steps of your work).
- **2.** Complete the following table:

Network Symbol	Network IP	Broadcast IP	First Allowed IP	Last Allowed IP	Number of Hosts
Α					
В					
С					
D					
Ε					

Question 2: Given the following topology, Where X in the given IP addresses ranges depends on your university ID (Example: 1161361) X=61 according to this ID.



Do the following:

- 1- Add a new router, switch, and PC to the topology of **EXP#2** that you have done.
- 2- Complete the static routing, check the connectivity of this new network!
 - a. Add screenshots of the steps you took with the time and date shown.
 - b. Show the routing table on the new router with the time and date shown.

What to submit:

- Question 1:
 - YourFirstName_YourIDNumber_SectionNumber.pdf file
 (PDF file showing all the steps of your work)
- Question 2:
 - YourFirstName_YourIDNumber_SectionNumber.pdf file (<u>Screenshots PDF File</u>)
 - YourFirstName_YourIDNumber_SectionNumber.pkt file (Packet Tracer File)

Explication Video:

• https://youtu.be/fHg_HIkEsk4

Notes:

• Mark 0 will be given to those who don't Include the University ID in their solution.

Deadline:

• Thursday, 26-9-2024, 11:59 PM.

Where to submit:

• Submit to ToDo No. 1 through ITC.

Good Luck [©]