Military Institute of Science and Technology
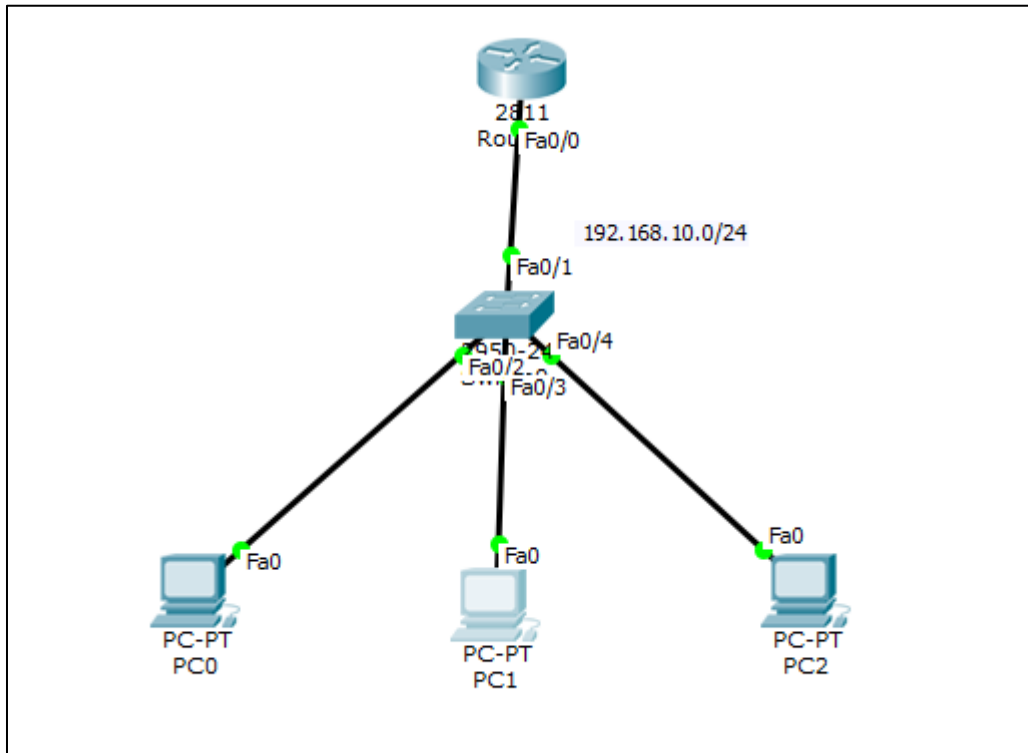## Department of CSE
CSE-310

Dynamic Host Configuration Protocol (DHCP))

Practice Problem-1:

Design the following network in packet tracer. Assign the IP addresses in the PC using DHCP.

Step-1: Configure Router(s).

Router0

Router>enable
Router#config t
Router(config)#interface f0/0
Router(config-if)#no shutdown
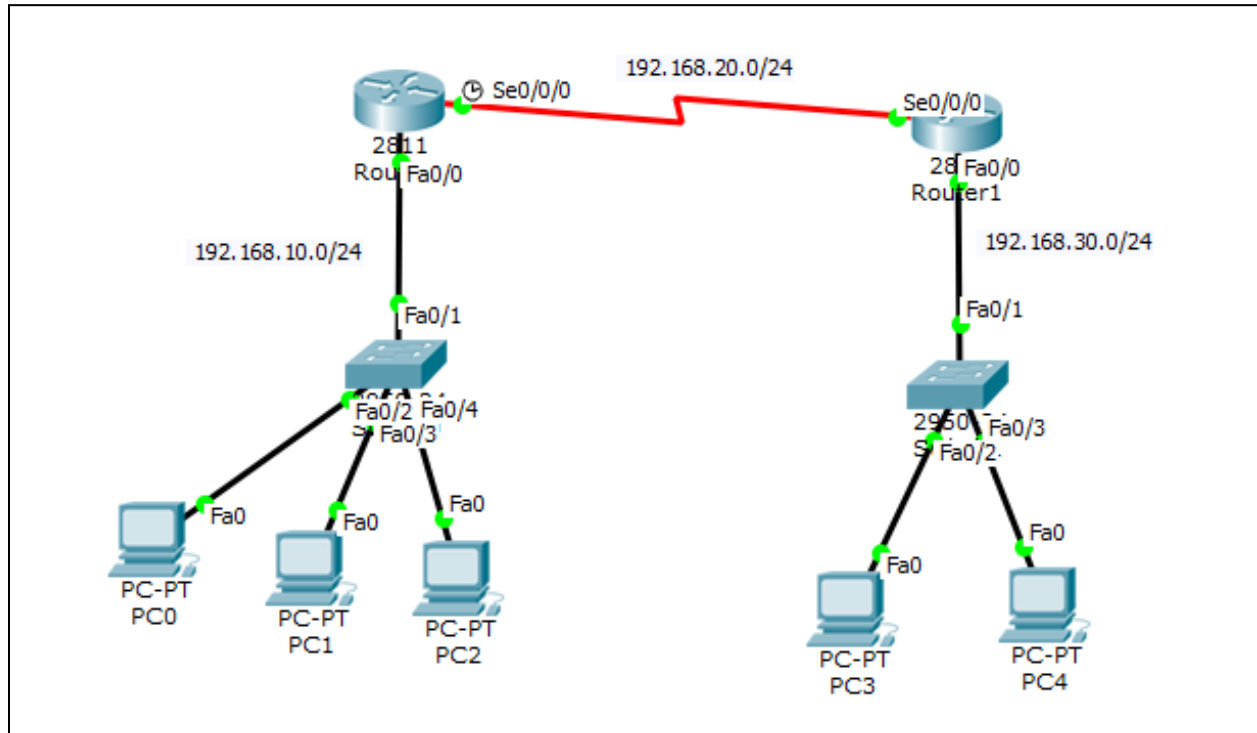Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#exit

Step-2: Assign the IP addresses in the PC using DHCP.

Router0

Router(config)#ip dhcp pool CSE
Router(dhcp-config)#network 192.168.10.0 255.255.255.0
Router(dhcp-config)#default-route 192.168.10.1
Router(dhcp-config)#exit

Practice Problem-2:

Design the following network in packet tracer. Use RIP protocol for routing and also assign the IP addresses in the PC using DHCP.

Step-1: Configure Router(s).

Router0

Router>enable
Router#config t
Router(config)#interface f0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#exit

Router(config)#interface s0/0/0
Router(config-if)#ip address 192.168.20.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#clock rate 64000
Router(config-if)#exit

Router1

Router>enable
Router#config t
Router(config)#interface f0/0
Router(config-if)#ip address 192.168.30.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit

Router(config)#interface s0/0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.20.2 255.255.255.0
Router(config-if)#exit
Router(config)#

Step2: Apply RIP to each to the router(s).

Router0

Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.10.0
Router(config-router)#network 192.168.20.0
Router(config-router)#no auto-summary
Router(config-router)#exit

Router1

Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.20.0
Router(config-router)#network 192.168.30.0
Router(config-router)#no auto-summary
Router(config-router)#exit

Step-3: Assign the IP addresses in the PC using DHCP.

Router0

Router(config)#ip dhcp pool CSE
Router(dhcp-config)#network 192.168.10.0 255.255.255.0
Router(dhcp-config)#default-route 192.168.10.1
Router(dhcp-config)#exit

Router1

Router(config)#ip dhcp pool MIST
Router(dhcp-config)#network 192.168.30.0 255.255.255.0
Router(dhcp-config)#default-route 192.168.30.1
Router(dhcp-config)#exit