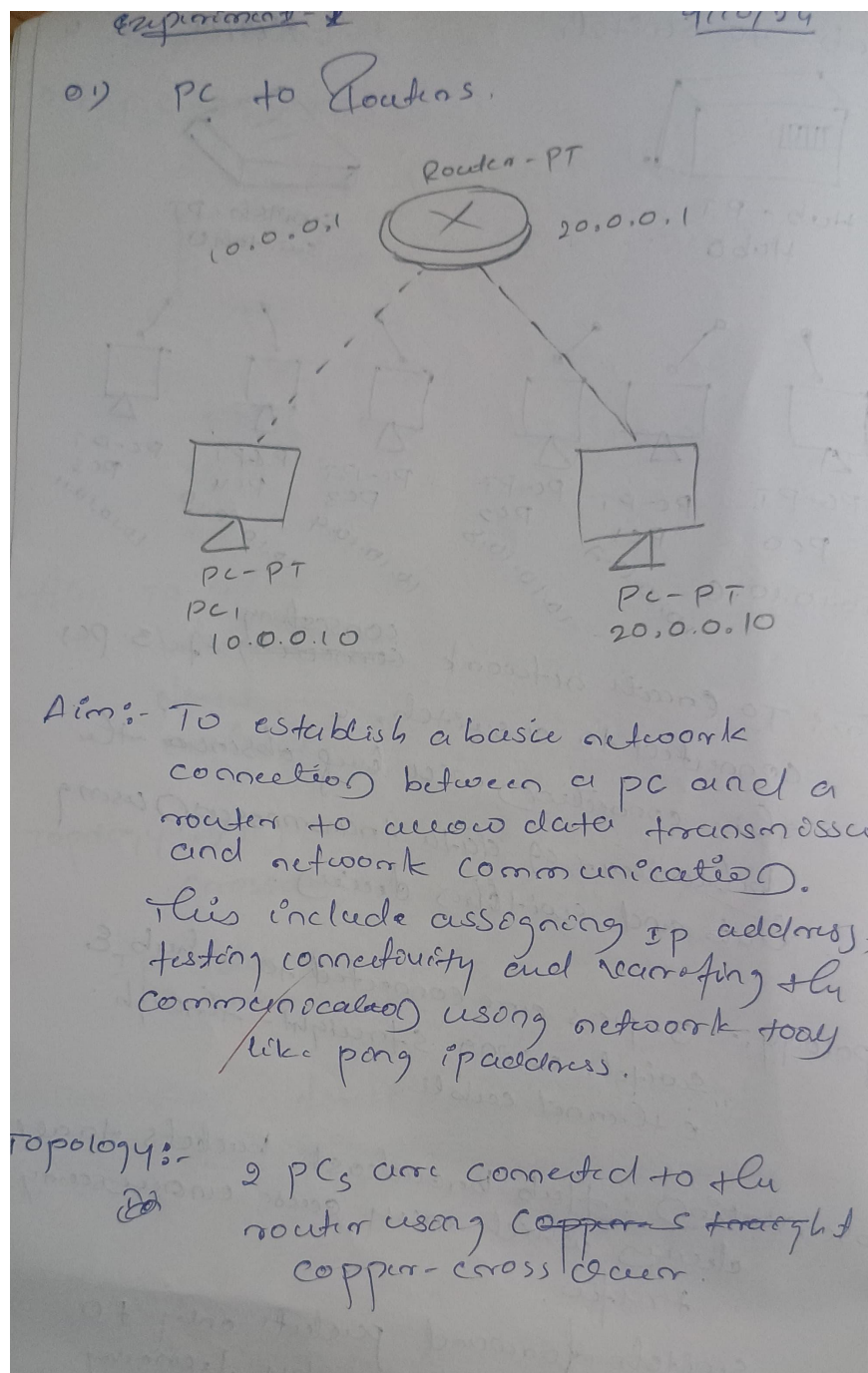


9/10/2024

Week-2(Experiment 2a)

Observation Book:



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procedure:

1. connect the 2 PCs to the router using copper-cross over cable.
2. clock on PC1 and PC2 clock on confog and give the ip address
PC1 = 10.0.0.10
PC2 = 20.0.0.20
3. select PC3 and clock on the confog and select Setting give gateway as a
10.0.0.1 for fastEthernet 0
20.0.0.1 for fastEthernet 1
4. open the CLI in the router and confog fastEthernet connection by following the commands:
\$ enable
\$ confog ~~terminal~~.
\$ interface fastEthernet.
\$ ip address.
\$ no shutdown
\$ exit.

- > enable
- > config terminal
- > interface fastethernet 0/0
- > ip address 10.0.0.1 255.0.0.0
gateway subnet mask

> no shutdown

> exit

Repeat the steps for other PC connection

observation: Routers can be used to manage communication and data transfer between the different network.

output:

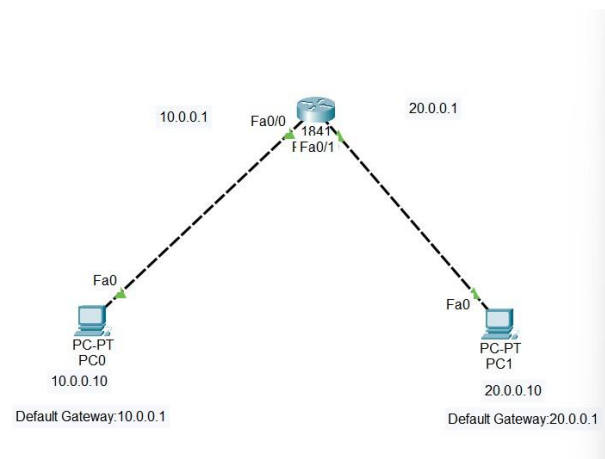
show ip route.

history of last command entered

C: 10.0.0.0/8 is directly connected
fastethernet 0/0

C: 20.0.0.0/8 is directly connected
fastethernet 1/0

Topology:



Output:

```
PC0
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 20.0.0.10: bytes=32 time<1ms TTL=127
Reply from 20.0.0.10: bytes=32 time=11ms TTL=127
Reply from 20.0.0.10: bytes=32 time<1ms TTL=127

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 3ms

C:\>
```

```
Router0
Physical Config CLI Attributes
IOS Command Line Interface
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
exit
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#
Router(config)#interface FastEthernet0/1
Router(config-if)#
Router(config-if)#
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route

Gateway of last resort is not set

C 10.0.0.0/8 is directly connected, FastEthernet0/0
C 20.0.0.0/8 is directly connected, FastEthernet0/1

Router#
```