Bahria University, Islamabad

Department of Software Engineering

Computer Communication & Networking Lab

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Lab Journal: 11

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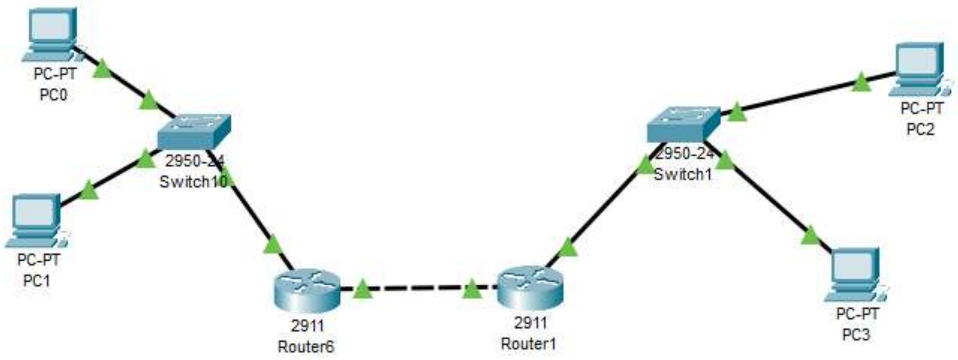
Task No:	Task Wise Marks		Documentation Marks		Total Marks (20)
	Assigned	Obtained	Assigned	Obtained	
1					
2					
3					
4					
5					

Comments:

Signature

LAB # 11

Configuring RIP (Routing Information Protocol) routing protocol between two routers



Step1:Assigned IP addresses:

R1:

```
R1>enable
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 1
R1(config-router)#network 192.168.1.0
R1(config-router)#network 10.0.0.0
R1(config-router)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#write memory
Building configuration...
[OK]
R1#
```

R2:

```
Router(config)#enable
% Incomplete command.
Router(config)#interface g0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

Router(config-if)#exit
Router(config)#interface g0/1
Router(config-if)#ip address 10.0.0.2 255.255.255.0
Router(config-if)#exit
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Step2:

R1:

```
R1>enable
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 1
R1(config-router)#network 192.168.1.0
R1(config-router)#network 10.0.0.0
R1(config-router)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console
```

R2:

```
Enter configuration commands, one per line.  End with CNTL/Z.
R2(config)#router rip
R2(config-router)#version
% Incomplete command.
R2(config-router)#version 1
R2(config-router)#network 192.168.2.0
R2(config-router)#network 10.0.0.0
R2(config-router)#end
R2#
%SYS-5-CONFIG_I: Configured from console by console
```

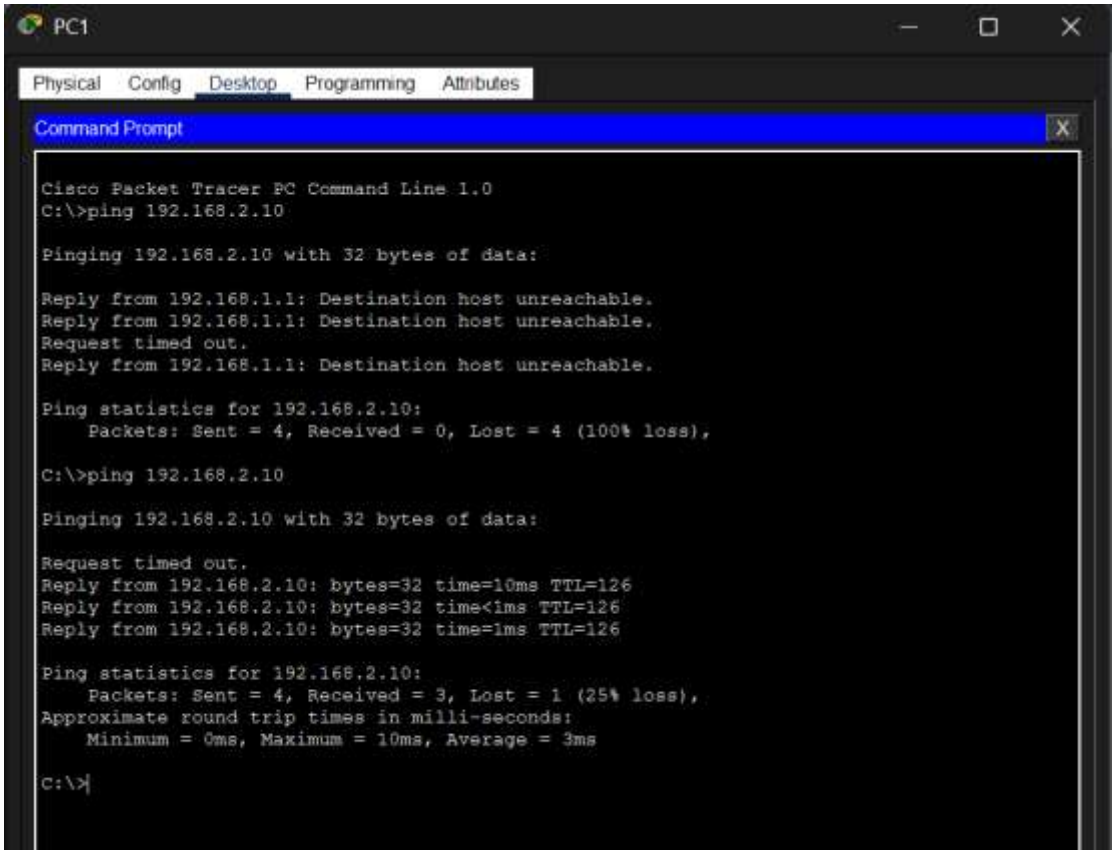
Step3: Assign IP address to all computer

PC Name	IP Address	Subnet Mask	Default Gateway
PC1	192.168.1.10	255.255.255.0	**192.168.1.1**
PC2	192.168.1.20	255.255.255.0	**192.168.1.1**
PC3	192.168.2.10	255.255.255.0	**192.168.2.1**
PC4	192.168.2.20	255.255.255.0	**192.168.2.1**

Step4: confirm connection

Use ping command to confirm connection of PC.

Successful connection



Step5: check routing protocol

show ip router

```
R1#show ip route
Codes: L - local, C - connected, S - static, 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

     10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.0.0.0/24 is directly connected, GigabitEthernet0/1
L       10.0.0.1/32 is directly connected, GigabitEthernet0/1
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, GigabitEthernet0/0
L       192.168.1.1/32 is directly connected, GigabitEthernet0/0
R    192.168.2.0/24 [120/1] via 10.0.0.2, 00:00:25, GigabitEthernet0/1

R1#
```