



Daffodil
International
University

Daffodil International University

LAB REPORT

Course Code:CSE314

Course Title : Computer Network

Submitted To:

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Section: PC-(A)

Depatment Of CSE

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Bank Networking System

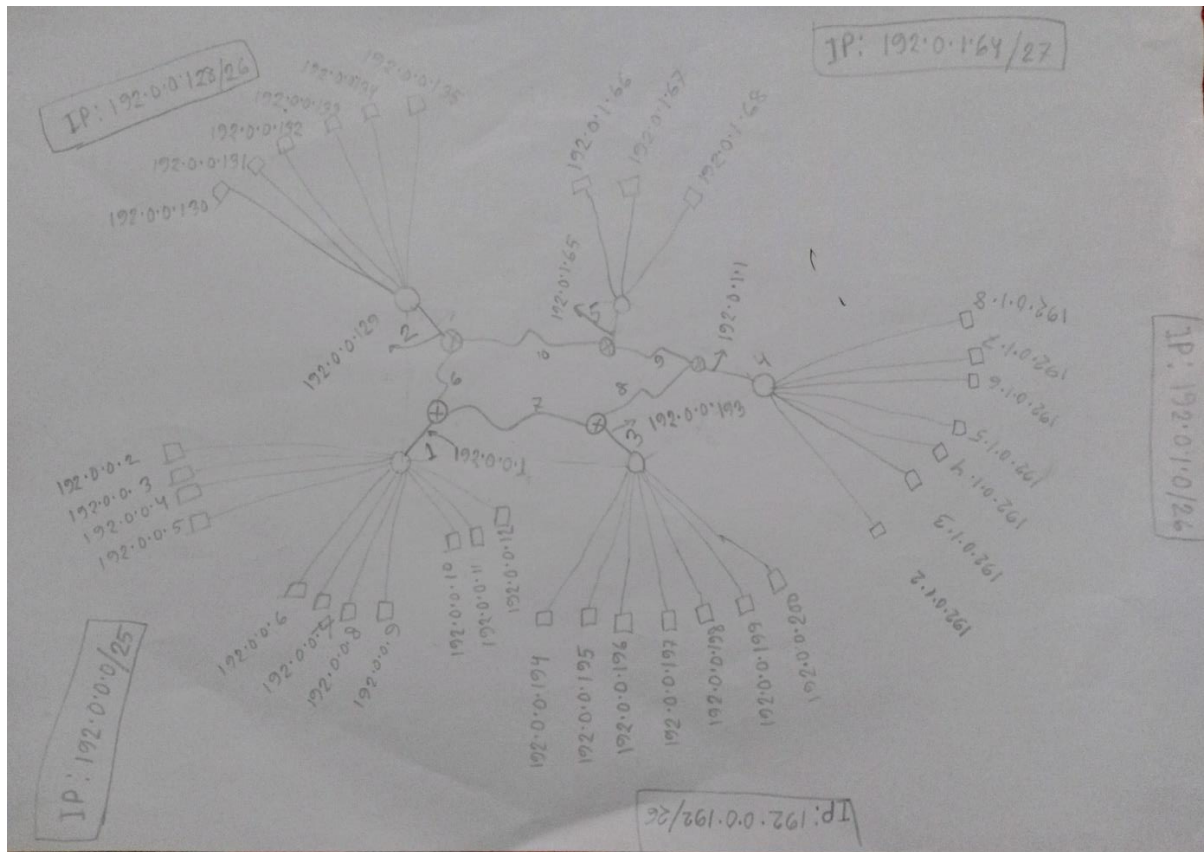
Here I am trying to build a bank network system and I hope it will be friendly user interface and easy to update .In this networking system are used by all banking user can use by shared their data very easily.

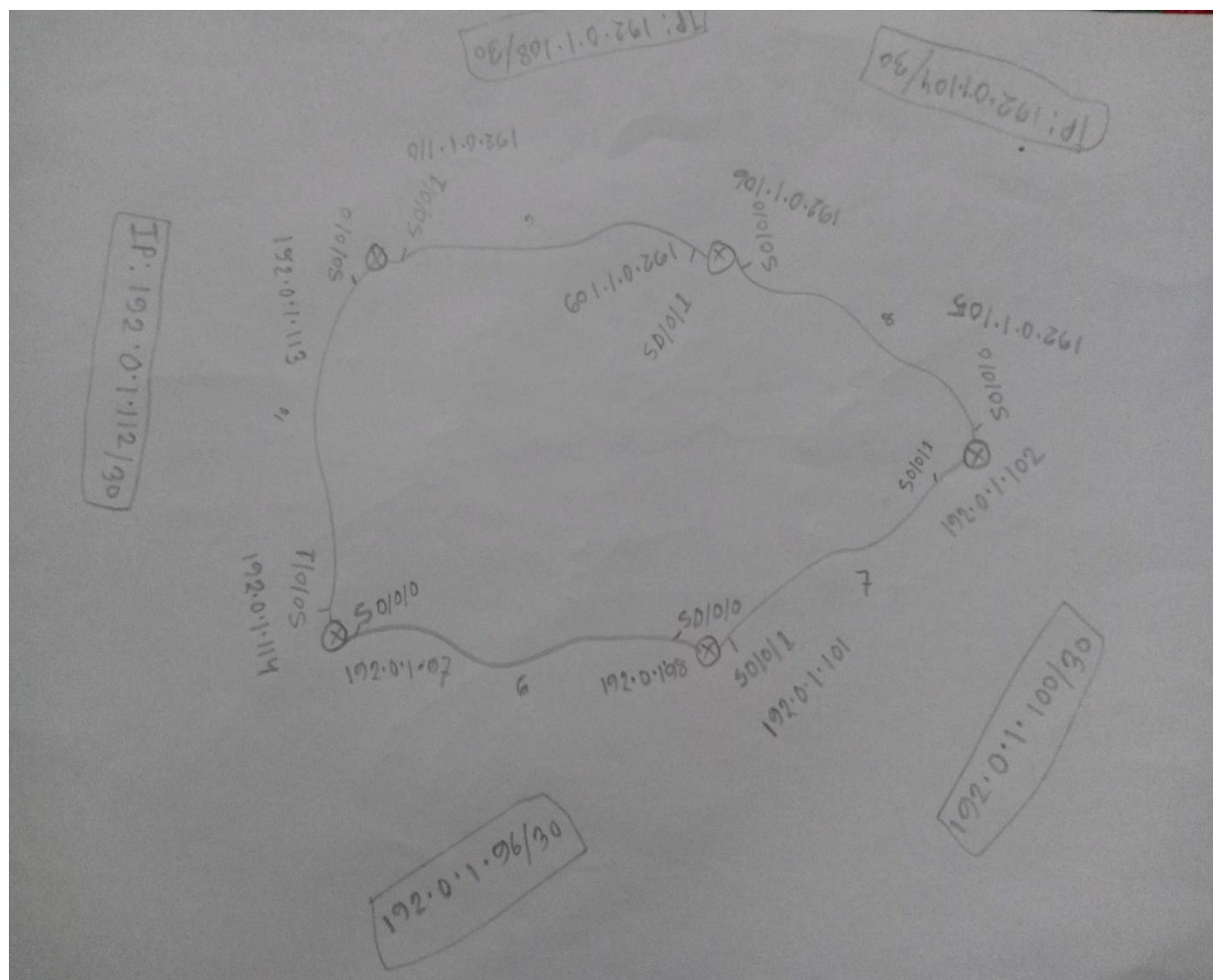
So that every user to take about network structure & security of banking system instantly anywhere .

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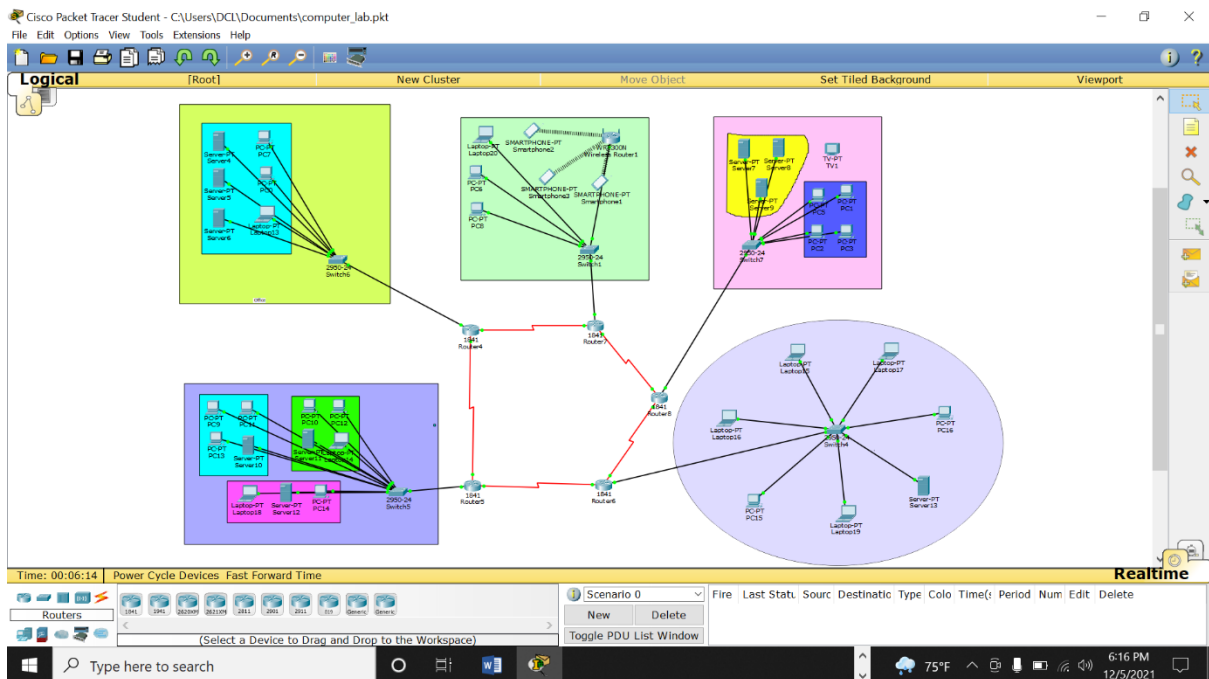
1. Complete Scenario
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Diagram (Hand drawing)





Design (Cisco Packet Tracer Student)



Calculation & Simulation

IP: 192.0.0.0

1st Net (101):

h. bit = 7

n. bit = 25

IP: 192.0.0.0/25

Mask: 255.255.255.128

Net: 192.0.0.0

1st IP: 192.0.0.1

Last IP: 192.0.0.126

Broad cast: 192.0.0.127

Here,

$$m = 256 - 128 \\ = 128$$

h = 0

b = 127

2nd Net (51):

h. bit = 6

n. bit = 26

IP: 192.0.0.0.128/26

Mask: 255.255.255.192

Net: 192.0.0.128

1st IP: 192.0.0.129

Last IP: 192.0.0.190

Broad cast: 192.0.0.191

Here,

$$m = 256 - 192 \\ = 64$$

h = 128

b = 191

3rd net (36):

h.bit = 6

n.bit = 26

IP: 192.0.0.192/26

Mask: 255.255.255.192

Net: 192.0.0.192

1st IP: 192.0.0.193

Last IP: 192.0.0.254

Broadcast: 192.0.0.255

Here,

$$m = 256 - 192 \\ = 64$$

$$h = 192$$

$$b = 255$$

4th net (31):

h.bit = 6

n.bit = 26

IP: 192.0.10/26

Mask: 255.255.255.192

Net: 192.0.0.1.0

1st IP: 192.0.1.1

Last IP: 192.0.1.62

Broadcast: 192.0.1.63

Here,

$$m = 256 - 192 \\ = 64$$

$$h = 0$$

$$b = 63$$

5th net (21):

h.bit = 5

n.bit = 27

IP: 192.0.1.64/27

Mask: 255.255.255.224

Net: 192.0.1.64

1st IP: 192.0.1.65

Last IP: 192.0.1.94

Broadcast: 192.0.1.95

$$\begin{aligned} m &= 256 - 224 \\ &= 32 \end{aligned}$$

$$h = 64$$

$$b = 95$$

6th net (2):

h.bit = 2

n.bit = 30

IP: 192.0.1.96/30

Mask: 255.255.255.252

1st IP: 192.0.1.97

Last IP: 192.0.1.99

Broadcast: 192.0.1.100

Net: 192.0.1.96

$$\begin{aligned} m &= 256 - 252 \\ &= 4 \end{aligned}$$

$$h = 96$$

$$b = 99$$

7th net (2):

h.bit = 2

n.bit = 30

IP: 192.0.1.100/30

Mask: 255.255.255.252

Net: 192.0.1.100

1st IP: 192.0.1.101

Last IP: 192.0.1.102

Broadcast: 192.0.1.103

$$\begin{aligned} m &= 256 - 252 \\ &= 4 \end{aligned}$$

$$h = 100$$

$$b = 103$$

8th Net (2):

h. bit = 2
n. bit = 30

IP: 192.0.1.104/30

Mask: 255.255.255.252

Net: 192.0.1.104

1st IP: 192.0.1.105

Last IP: 192.0.1.106

Broadcast: 192.0.1.107

m = 2

h = 104

b = 107

9th net (2):

h. bit = 2
n. bit = 30

IP: 192.0.1.108

Mask: 255.255.255.252

Net: 192.0.1.108

1st IP: 192.0.1.109

Last IP: 192.0.1.110

Broadcast: 192.0.1.111

m = 4

h = 108

b = 111

10th net (2):

h. bit = 2
n. bit = 30

IP: 192.0.1.112

Mask: 255.255.255.252

Net: 192.0.1.112

1st IP: 192.0.1.113

Last IP: 192.0.1.114

Broadcast: 192.0.1.115

m = 4

h = 112

b = 115

Code

R0,R1,R2,R3,R4

Router>

Router>en

Router#conf t

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

Router(config)#int f0/0

Router(config-if)#ip address 192.0.1.65 255.255.255.224

Router(config-if)#no sh

Router>

Router>

Router>en

Router#conf t

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

Router(config)#int s0/0/0

Router(config-if)#ip address 192.0.1.105 255.255.255.252

Router(config-if)#no sh

Router>

Router>en

Router#conf t

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

Router(config)#int f0/0

Router(config-if)#ip address 192.0.0.129 255.255.255.192

Router(config-if)#no sh

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

```
Router(config-if)#int s0/0/1
```

```
Router(config-if)#ip address 192.0.1.110 255.255.255.252
```

```
Router(config-if)#int s0/0/0
```

```
Router(config-if)#ip address 192.0.1.113 255.255.255.252
```

```
Router(config-if)#no sh
```

```
Router(config)#int s0/0/1
```

```
Router(config-if)# ip address 192.0.1.110 255.255.255.252
```

```
Router(config-if)#no sh
```

Protocol

```
Router>
```

```
Router>en
```

```
Router#conf t
```

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

```
Router(config)#
```

```
Router(config)#
```

```
Router(config)#
```

```
Router(config)#
```

```
Router(config)#
```

```
Router(config)#ip route 192.0.1.0 255.255.255.192 192.0.1.102
```

```
Router(config)#do wr
```

Building configuration...

[OK]

```
Router(config)#
```

```
Router#
```

%SYS-5-CONFIG_1: Configured from console by console

Router#

Router(config)#

Router(config)#

Router(config)#

Router(config)#ip route 192.0.0.192 255.255.255.192 192.0.1.101

Router(config)#do wr

Building configuration...

[OK]

Router#

Router#

Router#conf t

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

Router(config)#ip route 192.0.0.0 255.255.255.128 192.0.1.97

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router>

Router>en

Router#conf t

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

Router(config)#ip route 192.0.1.0 255.255.255.192 192.0.1.102

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router(config)#

Router(config)#ip route 192.0.1.100 255.255.255.252 192.0.1.98

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router>

Router>en

Router#conf t

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

Router(config)#ip route 192.0.1.96 255.255.255.252 192.0.1.101

Router(config)#

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router>

Router>

Router>

Router>en

Router#conf t

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

Router(config)#ip route 192.0.1.64 255.255.255.224 192.0.1.106

Router(config)#ip route 192.0.0.128 255.255.255.192 192.0.1.113

Router(config)#ip route 192.0.1.104 192.0.1.102

% Incomplete command.

Router(config)#ip route 192.0.2.104 255.255.255.252 192.0.1.102

Router(config)#do wr

Building configuration...

[OK]

Router>

Router>

Router>en

Router#conf t

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

Router(config)#ip route 192.0.1.0 255.255.255.192 192.0.1.105

Router(config)#ip route 192.0.0.192 255.255.255.192 192.0.1.101

Router(config)#ip route 192.0.0.0 255.255.255.128 192.0.1.97

Router(config)#ip route 192.0.1.100 255.255.255.252 192.0.1.105

Router(config)#ip route 192.0.1.96 255.255.255.252 192.0.1.101

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router>

Router>

Router>en

Router#conf t

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

Router(config)#ip route 192.0.1.64 255.255.255.224 192.0.1.106

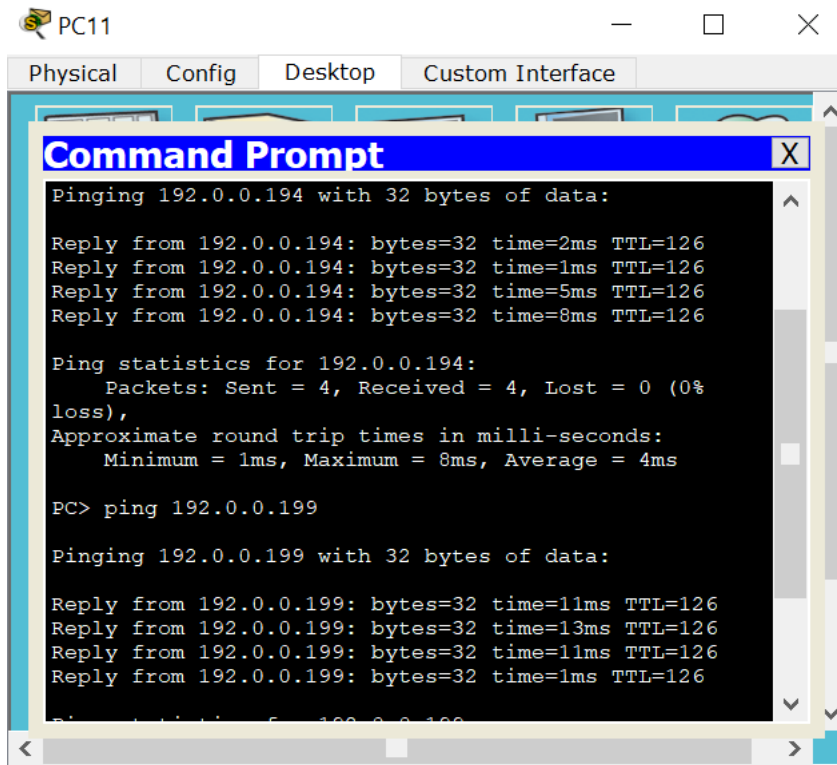
Router(config)#ip route 192.0.1.104 255.255.255.252 192.0.1.102

Router(config)#do wr

Building configuration...

[OK]

Result



PC11

Physical Config Desktop Custom Interface

Command Prompt

```
Pinging 192.0.0.194 with 32 bytes of data:

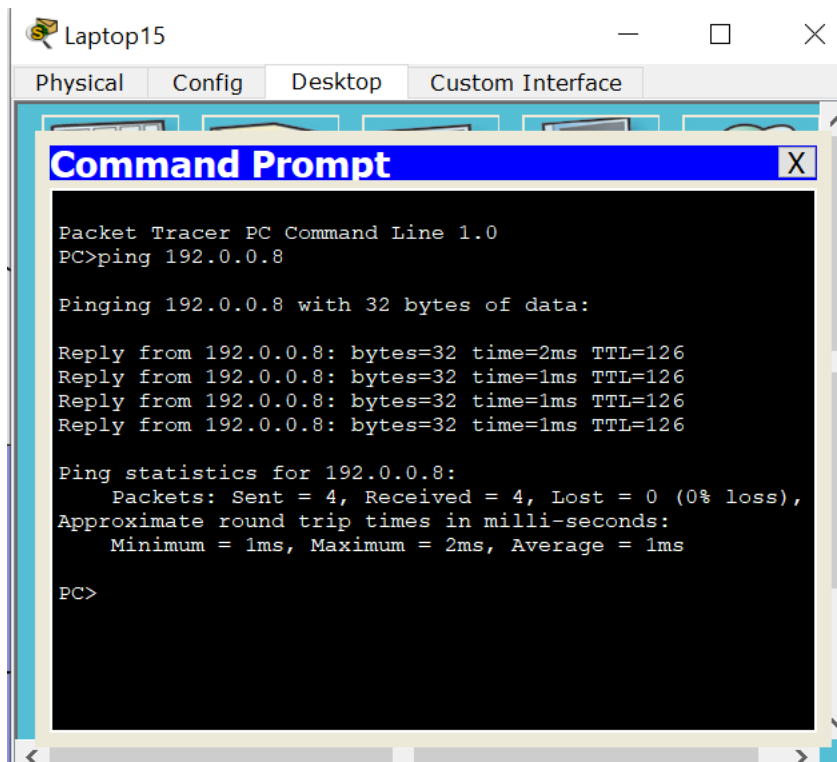
Reply from 192.0.0.194: bytes=32 time=2ms TTL=126
Reply from 192.0.0.194: bytes=32 time=1ms TTL=126
Reply from 192.0.0.194: bytes=32 time=5ms TTL=126
Reply from 192.0.0.194: bytes=32 time=8ms TTL=126

Ping statistics for 192.0.0.194:
    Packets: Sent = 4, Received = 4, Lost = 0 (0%
loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 8ms, Average = 4ms

PC> ping 192.0.0.199

Pinging 192.0.0.199 with 32 bytes of data:

Reply from 192.0.0.199: bytes=32 time=11ms TTL=126
Reply from 192.0.0.199: bytes=32 time=13ms TTL=126
Reply from 192.0.0.199: bytes=32 time=11ms TTL=126
Reply from 192.0.0.199: bytes=32 time=1ms TTL=126
```



Laptop15

Physical Config Desktop Custom Interface

Command Prompt

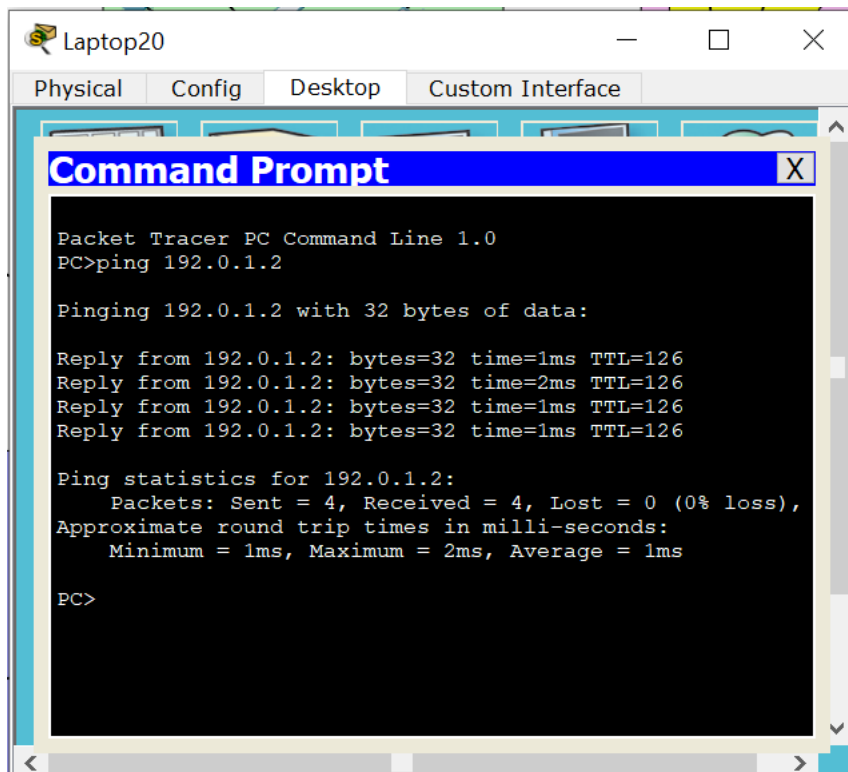
```
Packet Tracer PC Command Line 1.0
PC>ping 192.0.0.8

Pinging 192.0.0.8 with 32 bytes of data:

Reply from 192.0.0.8: bytes=32 time=2ms TTL=126
Reply from 192.0.0.8: bytes=32 time=1ms TTL=126
Reply from 192.0.0.8: bytes=32 time=1ms TTL=126
Reply from 192.0.0.8: bytes=32 time=1ms TTL=126

Ping statistics for 192.0.0.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

PC>
```



References & Resource :

1. Google classroom of Arif Mahmud Sir
2. Class Record of BLC(12/10/21) , Arif Mahmud sir