

---

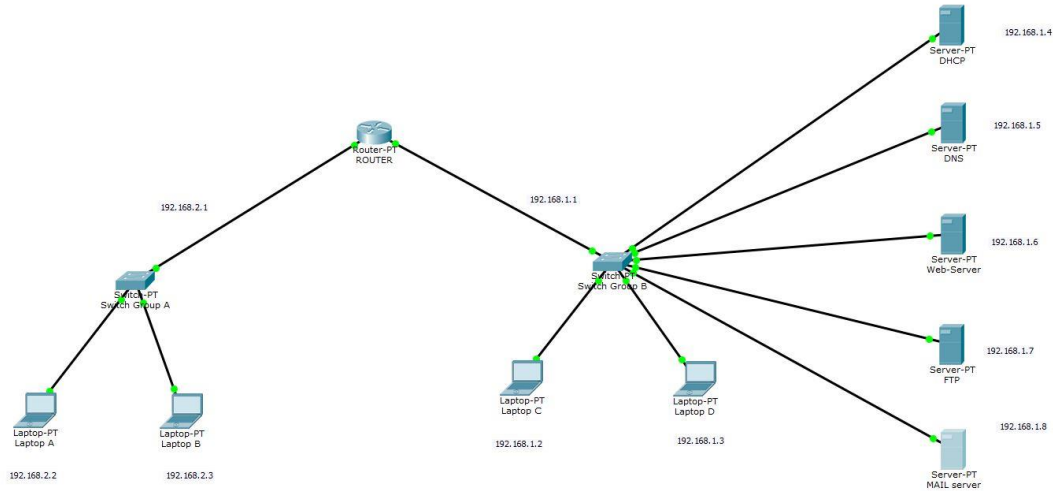
***Name: Muhammad Abeer***

***Roll No: 19P-0061***

***Section: 5-B***

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## TOPOLOGY



## IP configuration of router

```
Router(config-if)#interface fastethernet1/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#ex
Router(config)#interface fastethernet0/0
Router(config-if)#192.168.2.1 255.255.255.0
^
% Invalid input detected at '^' marker.
Router(config-if)#192.168.2.1 255.255.255.0
```

## IP Configuration of Servers

DHCP

PhysicalConfigServicesDesktopCustom Interface

IP Configuration

InterfaceFastEthernet0

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.4

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.5

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::260:2FFF:FEDA:E8DB

IPv6 Gateway

IPv6 DNS Server

DNS

Physical

Config

Services

Desktop

Custom Interface

IP Configuration

Interface

FastEthernet0

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.5

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.5

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::210:11FF:FECE:D4C4

IPv6 Gateway

IPv6 DNS Server

Web-Server

Physical Config Services Desktop Custom Interface

### IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.1.6

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

DNS Server: 192.168.1.5

IPv6 Configuration


☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::202:16FF:FE47:3809

IPv6 Gateway:

IPv6 DNS Server:

 FTP

Physical

Config

Services

Desktop

Custom Interface

IP Configuration

X

Interface

FastEthernet0

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.7

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.5

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::230:A3FF:FE46:C890

IPv6 Gateway

IPv6 DNS Server

MAIL server

Physical Config Services Desktop Custom Interface

### IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.1.8

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

DNS Server: 192.168.1.5

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static


IPv6 Address: /

Link Local Address: FE80::260:70FF:FE83:1D00

IPv6 Gateway:

IPv6 DNS Server:

## Assigning DHCP Pools

 ROUTER

Physical Config CLI

IOS Command Line Interface

```
Router>
Router>enable
Router#config
Configuring from terminal, memory, or network [terminal]? terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#dhcp pool Group-A
      ^
% Invalid input detected at '^' marker.

Router(config)#ip dhcp pool Group-A
Router(dhcp-config)#network 192.168.2.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.2.1
Router(dhcp-config)#dns-server 192.168.1.5
Router(dhcp-config)#ex
Router(config)#ip dhcp pool Group-B
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.0
Router(dhcp-config)#dns-server 192.168.1.5
Router(dhcp-config)#
```

Copy Paste



Physical

Config

Services

Desktop

Custom Interface

## SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

## DHCP

Interface FastEthernet0

Service ☒ On ☐ Off

Pool Name Group-B

Default Gateway 192.168.1.1

DNS Server 192.168.1.5

Start IP Address : 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum number of Users : 256

TFTP Server: 0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
Group-B	192.168.1.1	192.168.1.5	192.168.1.0	255.255....	256	0.0.0.0
Group-A	192.168.2.1	192.168.1.5	192.168.2.0	255.255....	256	0.0.0.0
server...	0.0.0.0	0.0.0.0	192.168.1.0	255.255....	512	0.0.0.0

&lt;

&gt;

## CONFIGURING MAIL BOXES

Laptop A

Physical Config Desktop Custom Interface

## Configure Mail

User Information

Your Name:

Email Address:

Server Information

Incoming Mail Server:

Outgoing Mail Server:

Logon Information

User Name:

Password:

Save Clear Reset

Laptop B

Physical Config Desktop Custom Interface

## Configure Mail

User Information

Your Name:

Email Address:

Server Information

Incoming Mail Server:

Outgoing Mail Server:

Logon Information

User Name:

Password:

Save Clear Reset

Laptop C

Physical Config Desktop Custom Interface

### Configure Mail

User Information

Your Name:

Email Address:

Server Information

Incoming Mail Server:

Outgoing Mail Server:

Logon Information

User Name:

Password:

Save Clear Reset

**Configure Mail** X

## User Information

Your Name:

laptopD

Email Address

d@mail.com

## Server Information

Incoming Mail Server

mail.com

Outgoing Mail Server

mail.com

## Logon Information

User Name:

laptopd

Password:


●●●●●●

Save

Clear

Reset

## Adding service in Mail Server

 MAIL Server

Physical Config Services Desktop Custom Interface

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

EMAIL

SMTP Service

☒ ON ☐ OFF

POP3 Service

☒ ON ☐ OFF

Domain Name:

User Setup

User

Password

laptopA

laptopB

laptopC

laptopD


+

-

Change

Password

## Adding services in DNS Server

 DNS

Physical

Config

Services

Desktop

Custom Interface

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name  Type 

A Record ▾

Address

Add

Save

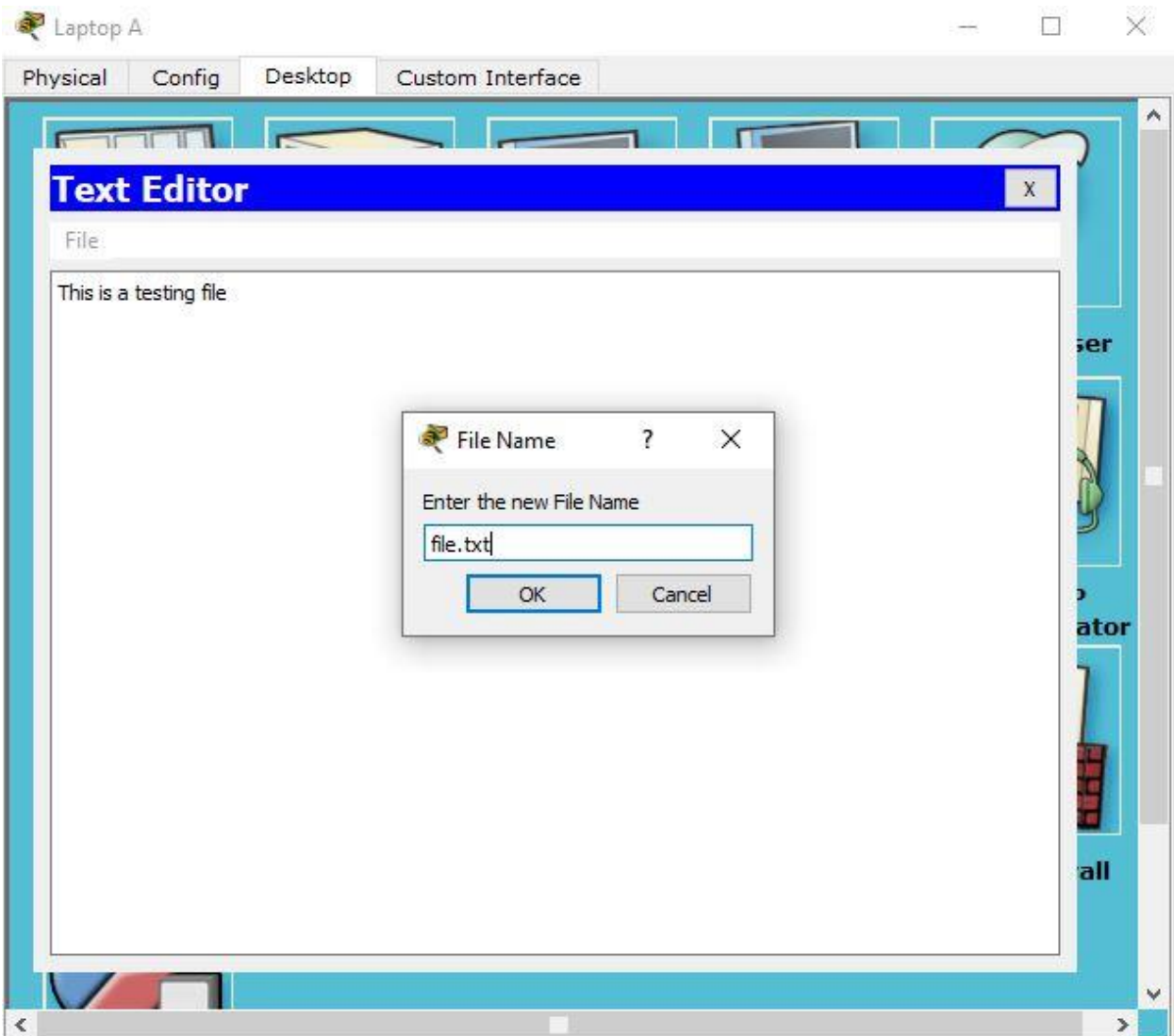
Remove

No.	Name	Type	Detail
0	ftp	A Record	192.168.1.7
1	mail.com	A Record	192.168.1.8
2	www.dhcp.com	A Record	192.168.1.4
3	www.webserver.com	A Record	192.168.1.6

DNS Cache



**Writing a text file and sending/receiving to FTP Server**



## Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ftp 192.168.1.7
Trying to connect...192.168.1.7
Connected to 192.168.1.7
220- Welcome to PT Ftp server
Username:cisco
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put file.txt

Writing file file.txt to 192.168.1.7:
File transfer in progress...

[Transfer complete - 22 bytes]

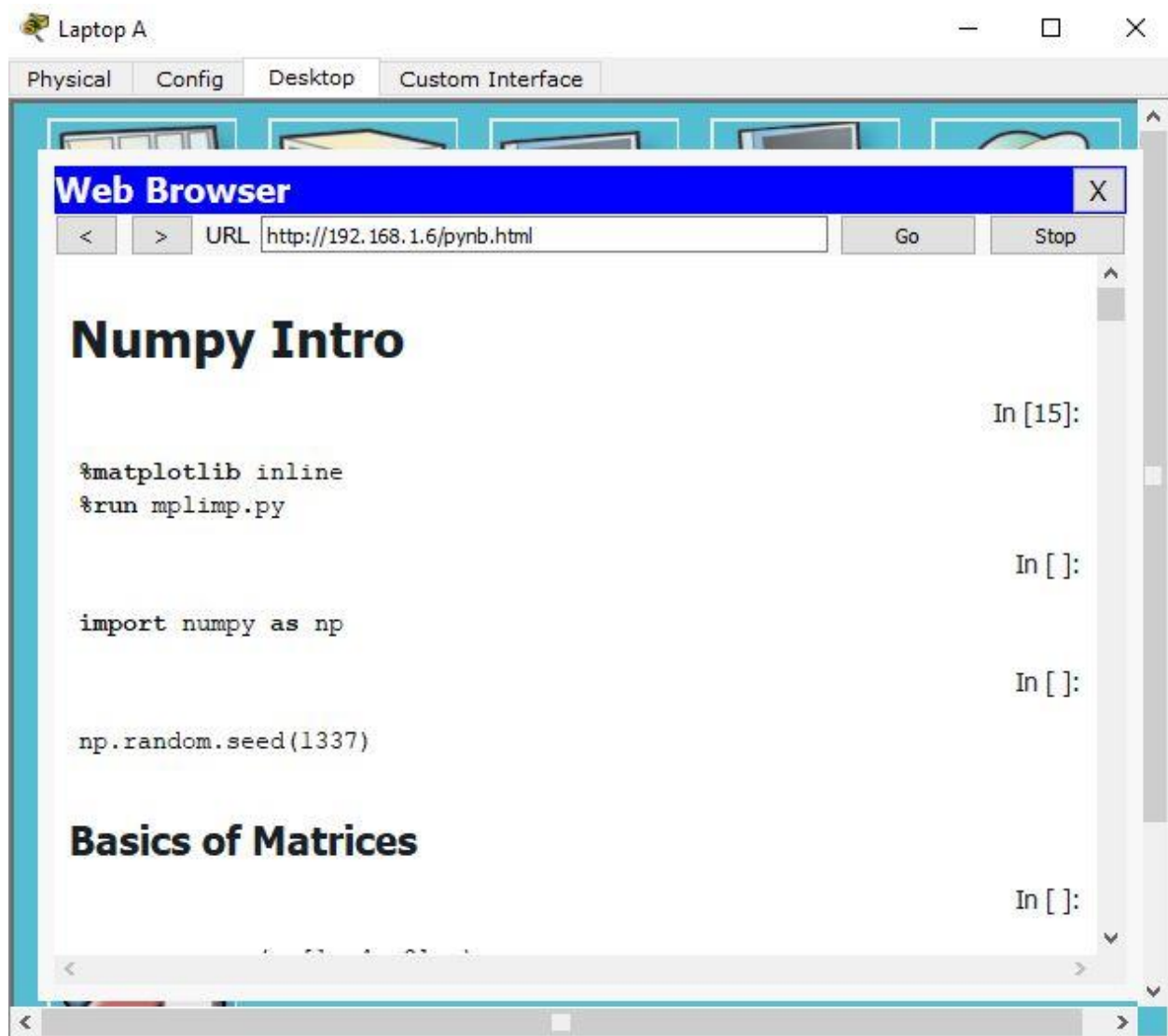
22 bytes copied in 0.024 secs (916 bytes/sec)
ftp>get file.txt

Reading file file.txt from 192.168.1.7:
File transfer in progress...

[Transfer complete - 22 bytes]

22 bytes copied in 0.01 secs (2200 bytes/sec)
ftp>
```

## Accessing Website from Webserver



## Sending EMAIL from 1 system to other

