



**PLATINUM JUBILEE**  
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# **Walchand College of Engineering, Sangli**

*(Government Aided Autonomous Institute)*

**Department of Information Technology**

**Computer Networks Lab**

**EVEN SEMESTER AY 2021-22**

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# **Department of Information Technology**

2021-22

**Experiment Number:** 6

**Experiment Name:** Implement FTP and SMTP server in CISCO packet tracer to observe.

- a. File transmission in the local network
- b. Email transmission in local host

## **Contents:**

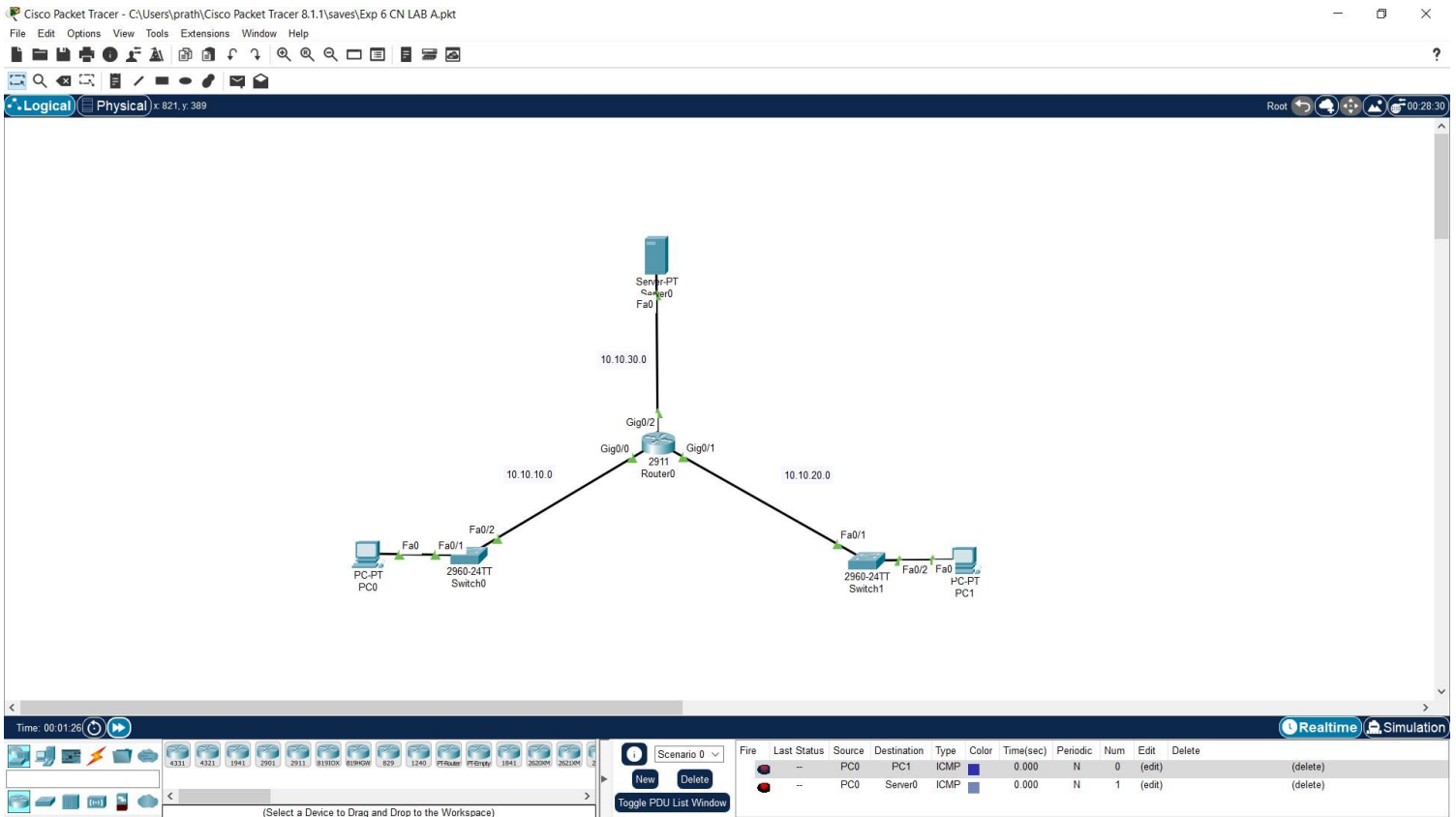
**Problem Statement :** Implement FTP and SMTP server in CISCO packet tracer to observe.

- a. File transmission in the local network
- b. Email transmission in local host

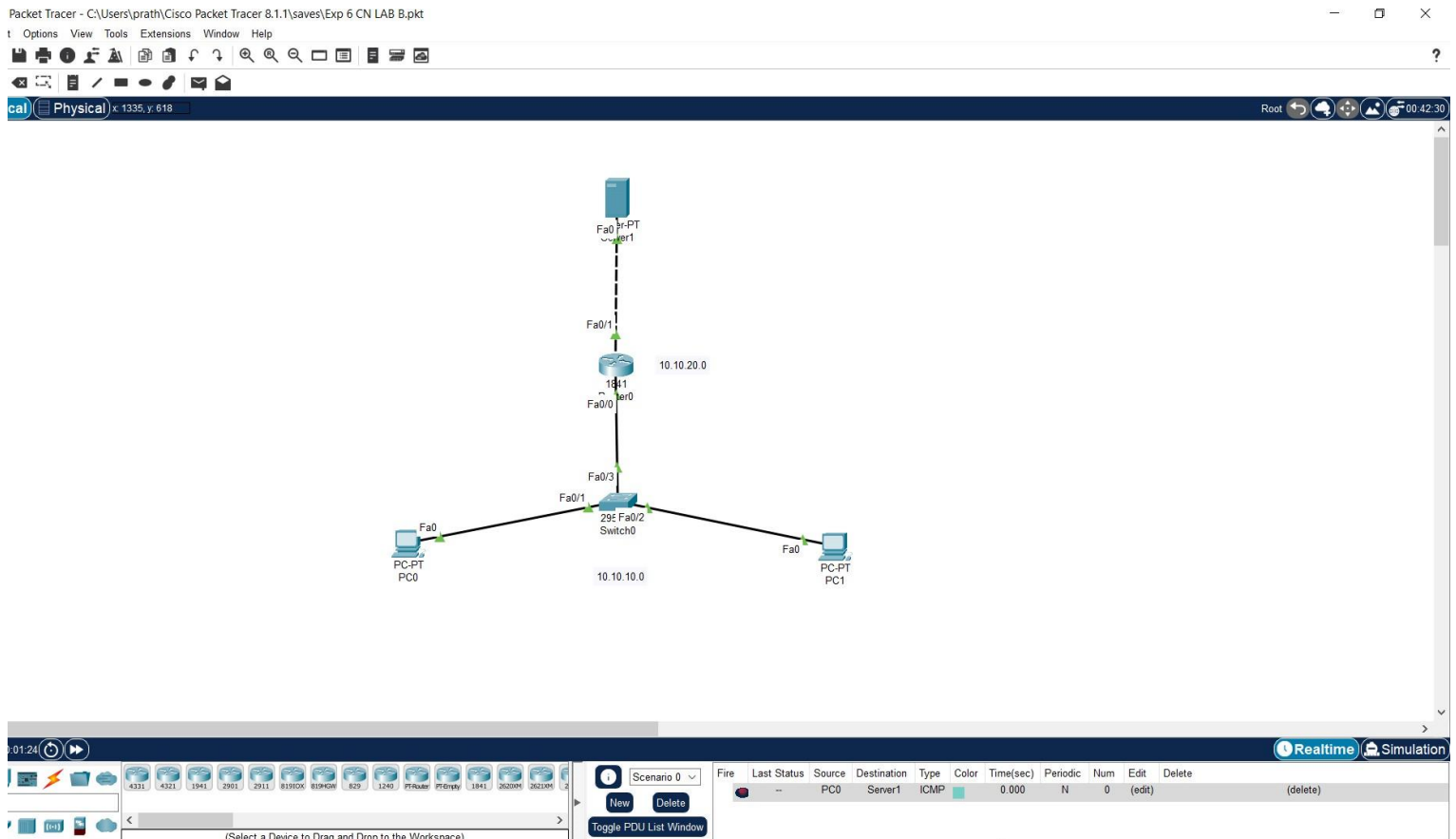
**Platform :** CISCO packet tracer

**Devices Required :** PC , Switch, Router, Server.

**Design :**  
**For SMTP**



# For FTP



## Implementation :

- Create the topology as shown in the design section for each protocol.
- After creating the topology configure the network

## For SMTP:

i) Go to the server, enable the EMAIL then create the domain name and users by setting up the username and password.

Server0

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

EMAIL

SMTP Service

☒ ON☐ OFF

POP3 Service

☒ ON☐ OFF

Domain Name:

User Setup

User

Password

om

omkar

+

-

Change

Password

☐ Top

ii) Now go to the email section of one the PC and configure the email, fill all the fields, add the email address created by you on the server, incoming mail server ip and the login information like Username and password.

PC1

Physical Config **Desktop** Programming Attributes

**Configure Mail** X

User Information

Your Name: Omkar

Email Address: omkar@gmail.com

Server Information

Incoming Mail Server: 10.10.30.2

Outgoing Mail Server: 10.10.30.2

Logon Information

User Name: omkar

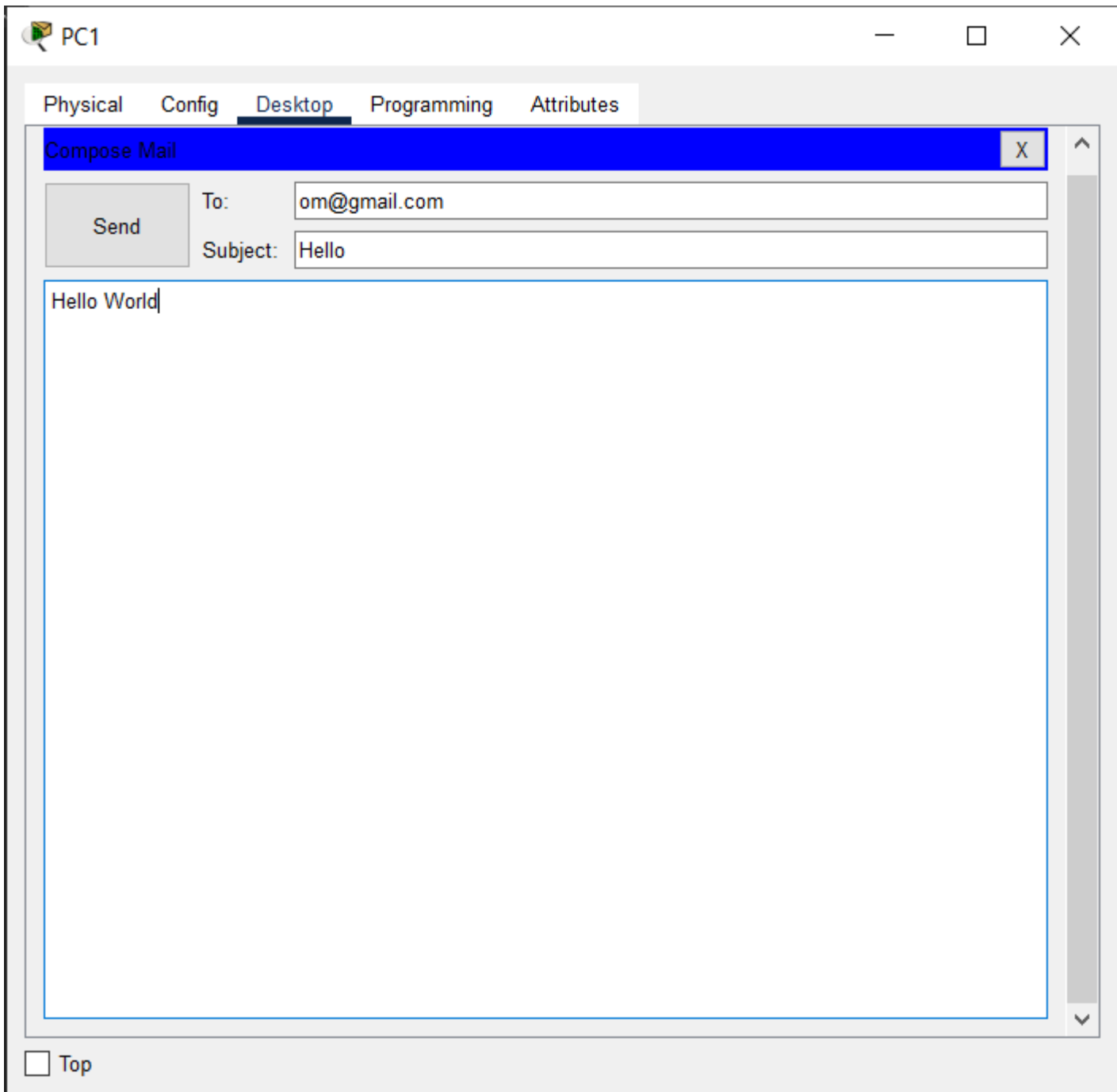
Password: ●●●

Save Remove Clear Reset

☐ Top

iii) Follow the above steps for the other user also

iv) Compose the email given from one user login to another and click send



v) An acknowledgment will be given to you by the mail

Sending mail to om@gmail.com , with subject : Hello  
.. Mail Server: 10.10.30.2

vi) The mail will be received by the reciever.



## For FTP:

vii) Turn on the FTP service on the server and create the username and password to access the FTP services.

The screenshot shows the 'Server1' configuration window with the 'Services' tab selected. The 'FTP' service is turned 'On'. Under 'User Setup', two users are listed: 'cisco' and 'omFile', both with 'RWDNL' permissions. A list of files is shown at the bottom, including 'asa842-k8.bin' and 'asa923-k8.bin'. A 'Top' button is at the bottom left.

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP**
- IoT
- VM Management
- Radius EAP

FTP

Service ☒ On ☐ Off

User Setup

Username  Password

☐ Write ☐ Read ☐ Delete ☐ Rename ☐ List

	Username	Password	Permission
1	cisco	cisco	RWDNL
2	omFile	123	RWDNL

Add Save Remove

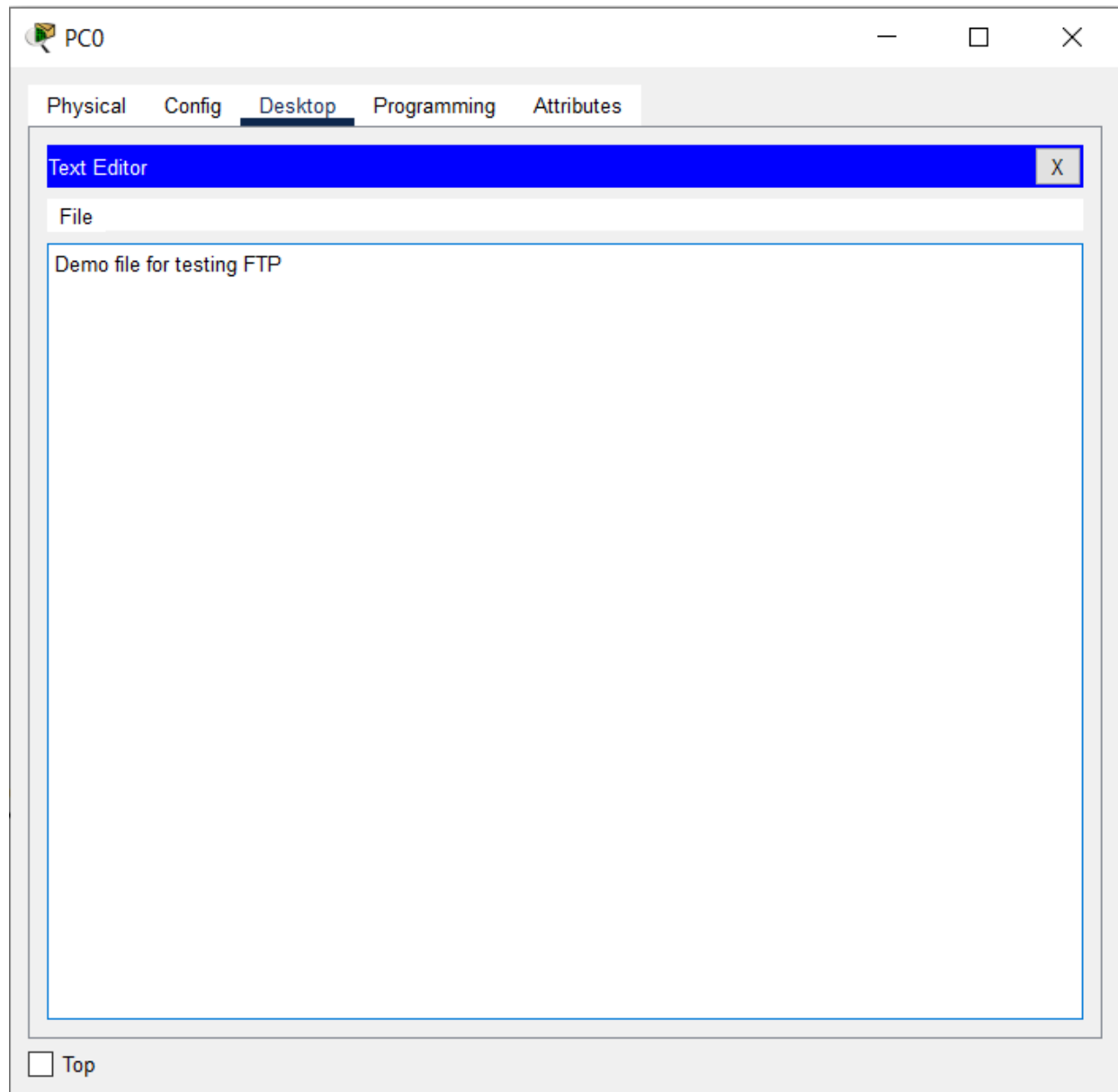
File

1	asa842-k8.bin
2	asa923-k8.bin
3	c1841-advipservicesk9-mz.124-15.T1.bin
4	c1841-iobase-mz.123-14.T7.bin

Remove

☐ Top

viii) First we have to create a file on of the user text editor and need to save it.



ix) Open that PC command prompt access the FTP server by using the command “ftp ip\_server”

x) Put the credentials for the server ftp login and use command “put file\_name” to upload the file



PC0

Physical Config Desktop Programming Attributes

Command Prompt



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ftp 10.10.20.2
Trying to connect...10.10.20.2
Connected to 10.10.20.2
220- Welcome to PT Ftp server
Username:prathamFile
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put demo.txt

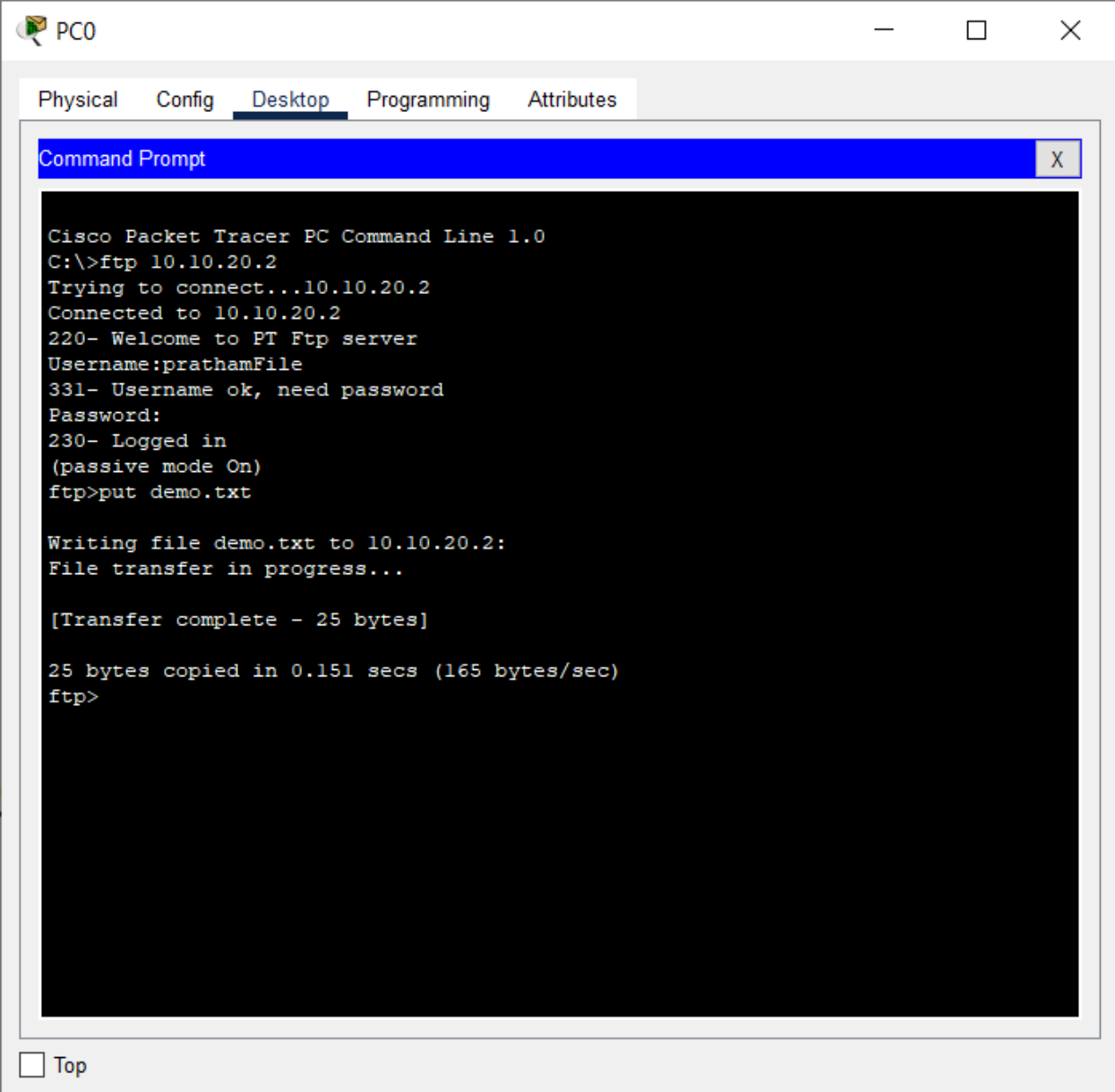
Writing file demo.txt to 10.10.20.2:
File transfer in progress...

[Transfer complete - 25 bytes]

25 bytes copied in 0.151 secs (165 bytes/sec)
ftp>Z
```

☐ Top

xi) Put the credentials for the server ftp login on another device and use command “get file\_name” to download the file



The screenshot shows a Cisco Packet Tracer PC Command Line window for PC0. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt window. The Command Prompt shows the following text:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ftp 10.10.20.2
Trying to connect...10.10.20.2
Connected to 10.10.20.2
220- Welcome to PT Ftp server
Username:prathamFile
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put demo.txt

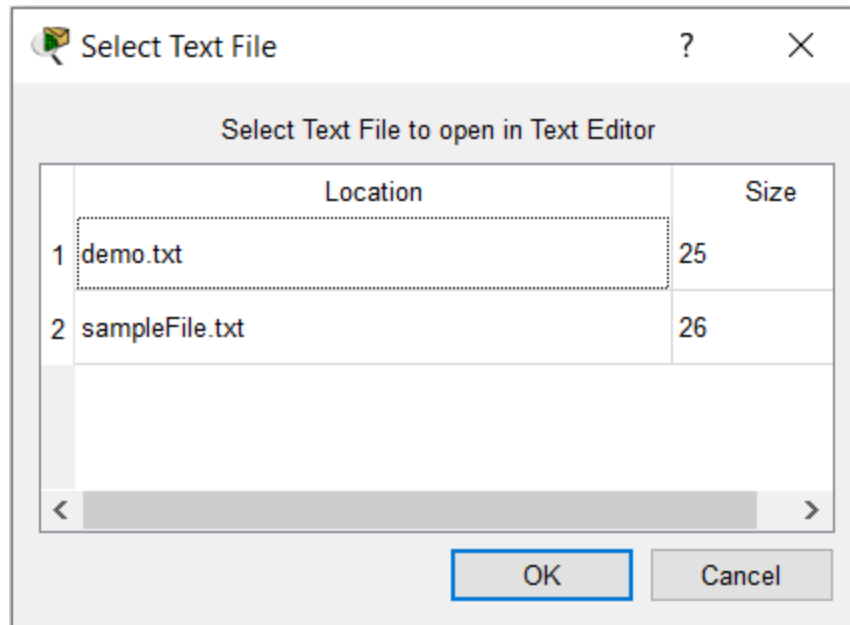
Writing file demo.txt to 10.10.20.2:
File transfer in progress...

[Transfer complete - 25 bytes]

25 bytes copied in 0.151 secs (165 bytes/sec)
ftp>
```

At the bottom of the window, there is a checkbox labeled "Top".

xii) File has been successfully downloaded



**Results:** SMTP is used for email transmission and FTP is used for file transmission.

Dr. P. K. Kharat  
(Course Teacher)