

Experiment No. 10

Date - 12/06/2021

## Simple Mail Transfer Protocol

### Aim:

To write a program to implement Simple Mail Transfer Protocol.

### THEORY:

The Simple Mail Transfer Protocol (SMTP) is an internet standard communication protocol for electronic mail transmission. Mail servers and other message transfer agents use SMTP to send and receive mail messages. E-mail client (such as Outlook, Eudora, or Mac OS X Mail) uses SMTP to send a message to the mail server, and the mail server uses SMTP to relay that message to the correct receiving mail server.

Python provides a smtplib module, which defines an SMTP client session object that can be used to send mail to any Internet machine with an SMTP or ESMTP listener daemon. An SMTP object has an instance method called sendmail, which is typically used to do the work of mailing a message.

It takes three parameters –

- |                  |  |
|------------------|--|
| 1. The sender    | – A string with the address of the sender.                         |
| 2. The receivers | – A list of strings, one for each recipient.                       |
| 3. The message   | – A message as a string formatted as specified in the various RFCs |

## **Algorithm**

1. Start
2. Import modules `smtpplib` , `email.mime.text`
3. Initialize the variables sender, receivers, port
4. Initialize the message using `MIMETEXT` function
5. Assign values to Subject, From, To parameters
6. Create a SMTP server using `smtpplib.SMTP()` and assign local host and port
7. Quit the server
8. Stop

## **Program**

```
import smtplib
from email.mime.text import MIMEText
sender = 'admin@example.com'
receivers = ['ananthum0938@gmail.com']
port = 1924
msg = MIMEText('Testing SMTP!')
msg['Subject'] = 'Testing!'
msg['From'] = 'admin@example.com'
msg['To'] = 'info@example.com'
server = smtplib.SMTP('localhost', port)
server.sendmail(sender, receivers, msg.as_string())
print("Successful !!!")
server.quit()
```

## **Output**

```
> &  
C:/Users/DEEPTHI/AppData/Local/Programs/Python/Python39  
/python.exe -m smtpd -c DebuggingServer -n localhost:1924
```

----- MESSAGE FOLLOWS -----

Content-Type: text/plain; charset = "us-ascii"

MIME-Version: 1.0

Content-Transfer-Encoding: 7bit

Subject: Testing!

From: [admin@example.com](mailto:admin@example.com)

To: [info@example.com](mailto:info@example.com)

X-Peer: 127.0.0.1

Testing SMTP!

----- END MESSAGE -----

```
> &  
C:/Users/DEEPTHI/AppData/Local/Programs/Python/Python39  
/python.exe "C:/Users/DEEPTHI/Desktop/CP/NW Lab/E10.py"
```

Successful !!!

## **Result**

Successfully executed the program to implement Simple Mail Transfer Protocol.