

practical -12

Aim: a) Implement echo client server using TCP/UDP sockets.

ProgramServer.py

```
import socket
def start = server(host='127.0.0.1', port=12345):
```

```
with socket.socket(socket.AF_INET, socket
```

```
SOCK_DGRAM) as s:
```

```
s.bind((host, port))
```

```
print(f"UDP server running on {host}:"  
      f"{port}")
```

```
while True:
```

```
    data, addr = s.recvfrom(1024)
```

```
    print(f"Received message from {addr}:"  
          f"{data.decode()}")
```

```
start = server()
```

client.py

```
import socket
```

```
import time
```

```
def ping = server(host='127.0.0.1', port=12345):
```

```
with socket.socket(socket.AF_INET, socket
```

```
SOCK_DGRAM) as s:
```

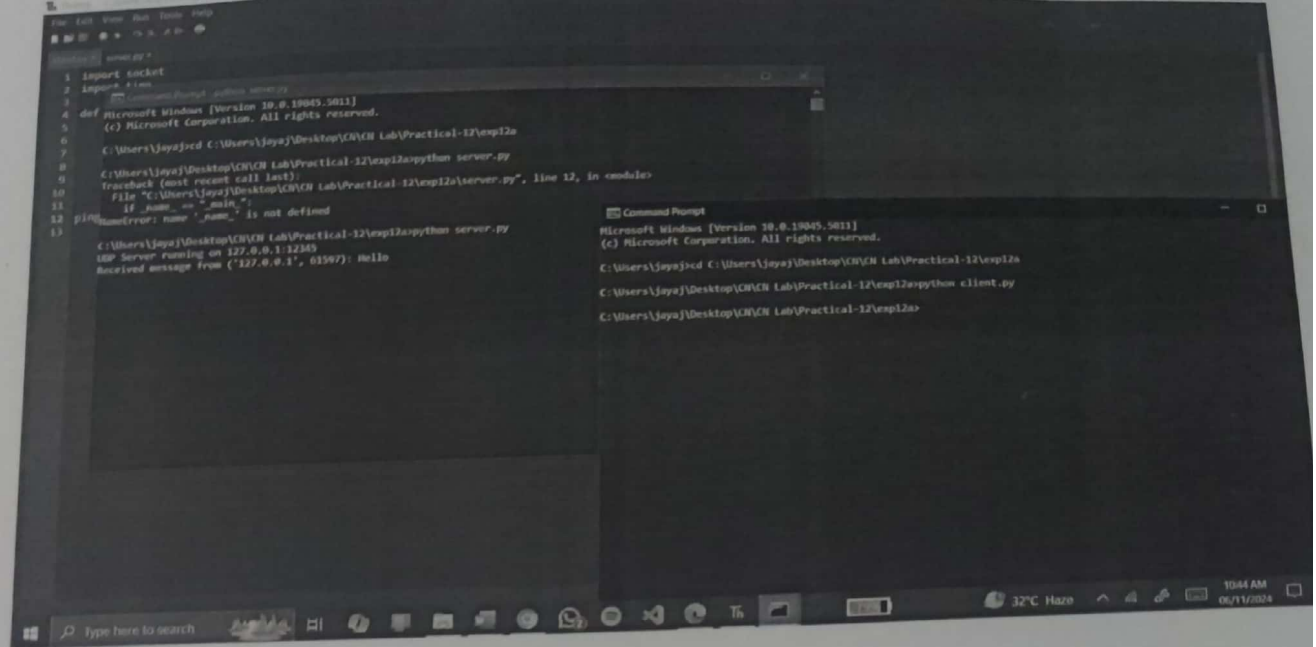
```
try:
```

```
    s.sendto(b'Hello', (host, port))
```

```
except socket.timeout:
```

```
    print("Request timed out")
```

```
ping = server()
```



Output

Result: Program  
Thus the ~~Output~~ is successfully executed and  
Output is verified.

Ques) Implement chat client server using TCP/UDP sockets.

program .  
 chat : server.py  
 import socket  
 def recvr1():  
 port = 12345  
 host = '127.0.0.1'  
 with socket.socket(socket.AF\_INET,  
 socket.SOCK\_STREAM) as s:  
 s.bind((host, port))  
 while True:  
 d, add = s.recvfrom(1024)  
 print("client", {d.decode()})  
 a = input("Enter reply")  
 s.sendto(a.encode(), add)  
 if (a == "end"):  
 break  
 exit

recvr1().  
 recvr2.py  
 import socket  
 import time  
 def recvr2(a):  
 host = '127.0.0.1'  
 port = 12345  
 with socket.socket(socket.AF\_INET,  
 socket.SOCK\_DGRAM) as s:  
 s.sendto(a.encode(), (host, port))  
 d, add = s.recvfrom(1024)  
 print({d.decode()})  
 while True:  
 a = input("Enter message")  
 if (a == "end"):  
 recvr2(a)





break  
else:  
    recr 2 (a)

output

Result:

Thus the program is successfully executed  
and output is verified.