

# CEL 51, DCCN, Monsoon 2020

## Lab 8: RIPv2 Router Configuration

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### Aim

Creating a client and server in Python using Socket Programming

### Code

#### Server (in file server.py)

```
import socket
serv = socket.socket(socket.AF_INET, socket.SOCK_STREAM)

serv.bind(("localhost", 10000))
serv.listen(5)

while True:
    conn, addr = serv.accept()
    print(f"Connection from {addr}")
    from_client = ''.encode('utf-8')

    while True:
        data = conn.recv(4096)
        if not data:
            break
        from_client += data
        print(from_client.decode('utf-8'))

    message = "I am server"
    conn.send(message.encode('utf-8'))
```

#### Client (in file client.py)

```
import socket

client = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
client.connect(("localhost", 10000))

message = "I am client\n"
client.send(message.encode('utf-8'))

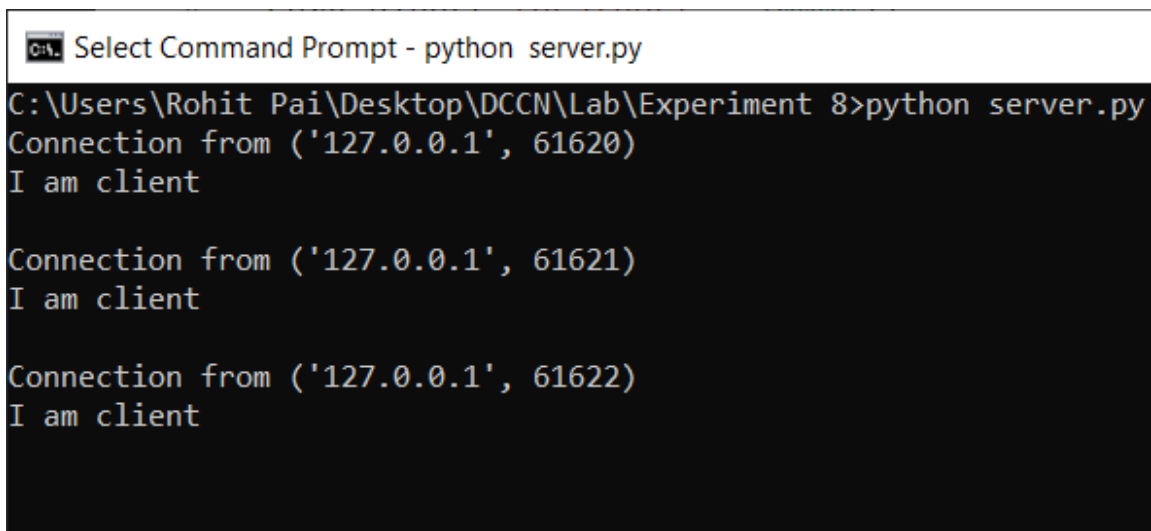
from_server = client.recv(4096)

client.close()

print(from_server.decode('utf-8'))
```

## Output

### Server

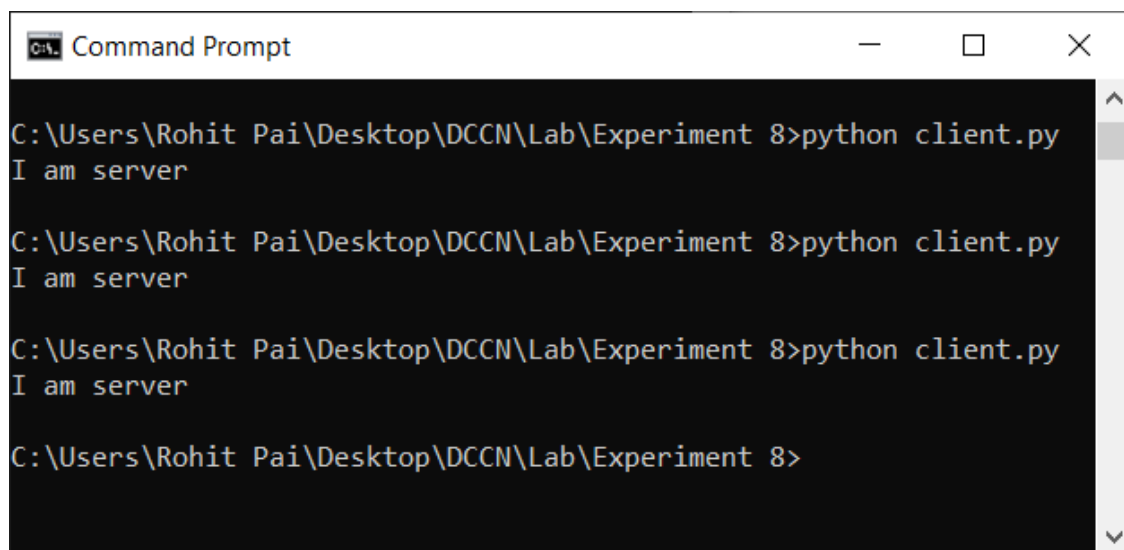


```
C:\Users\Rohit Pai\Desktop\DCCN\Lab\Experiment 8>python server.py
Connection from ('127.0.0.1', 61620)
I am client

Connection from ('127.0.0.1', 61621)
I am client

Connection from ('127.0.0.1', 61622)
I am client
```

### Client



```
C:\Users\Rohit Pai\Desktop\DCCN\Lab\Experiment 8>python client.py
I am server

C:\Users\Rohit Pai\Desktop\DCCN\Lab\Experiment 8>python client.py
I am server

C:\Users\Rohit Pai\Desktop\DCCN\Lab\Experiment 8>python client.py
I am server

C:\Users\Rohit Pai\Desktop\DCCN\Lab\Experiment 8>
```

## Conclusion

I learnt how to create a simple client and server in Python using socket programming.