Name: Prathamesh Bagekari
Branch: TE Computer
Batch: A
UID: 2018130002

CEL 51, DCCN, Monsoon 2020
Lab 8: Socket Programming

AIM: To implement Socket Programming and establish a connection between client and server.

THEORY:

Socket programming is a way of connecting two nodes on a network to communicate with each other. One socket(node) listens on a particular port at an IP, while another socket reaches out to the other to form a connection. Server forms the listener socket while the client reaches out to the server. They are the real backbones behind web browsing. In simpler terms there is a server and a client.

CODE:

- **server.py**

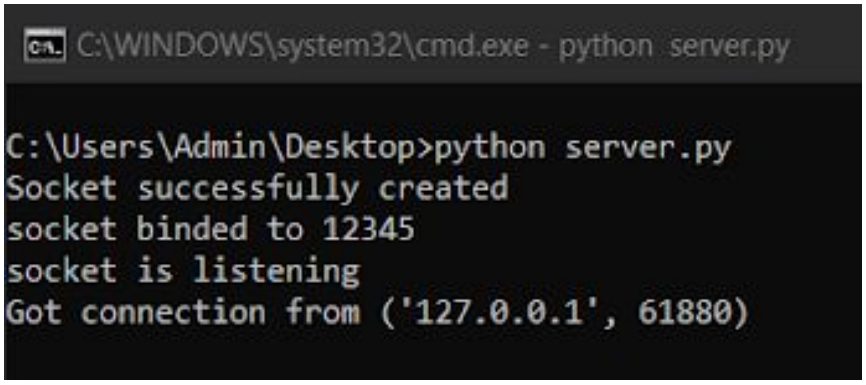
```
import socket

s = socket.socket()
print("Socket successfully created")
port = 12345

s.bind(('', port))
print ("socket binded to %s" %(port))

s.listen(5)
print ("socket is listening")

while True:

   c, addr = s.accept()
   print('Got connection from', addr)
   c.sendall(b'Thank you for connecting')
```

- **client.py**

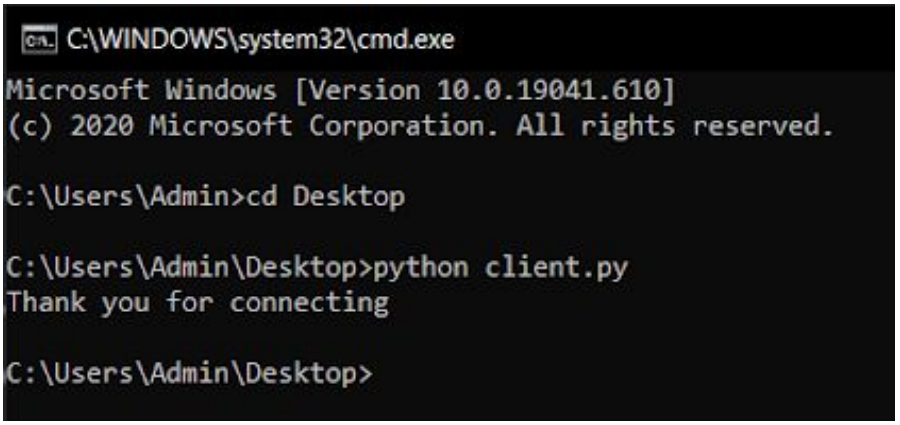
```
import socket

s = socket.socket()
port = 12345

s.connect(('127.0.0.1', port))
print(s.recv(1024).decode())
```

OUTPUT:

- **server.py**



- **client.py**



CONCLUSION :

I understood how to successfully establish a connection between client and server using socket programming.

REFERENCES :

1. geeksforgeeks.org/socket-programming-python/