

# Socket

```
1 import socket
2
3
4
5 ip = socket.gethostname('localhost')
6 print(ip)
7
8
```

user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog

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(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$ python server.py

127.0.0.1

(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$

home > user > Desktop > fcis > Second Semester > Net\_Prog > server.py

```
1  import socket
2
3
4
5  ip = socket.gethostbyname('localhost')
6  print(ip)
7
8
9  Name=socket.gethostname()
10 print(Name)
11
12 Name2=socket.gethostbyaddr(str(ip))
13 print(Name2)
14
15 port=socket.getservbyport(80)
16 print(port)
17
18 port2=socket.getservbyname("ftp")
19 print(port2)
20
```

user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog

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(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$ python server.py

127.0.0.1

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('localhost', [], ['127.0.0.1'])

http

21

(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$

home > user > Desktop > fcis > Second Semester > Net\_Prog > server.py

```
1  import socket
2
3
4
5  ip = socket.gethostbyname('www.google.com')
6  print(ip)
7
8
9  Name=socket.gethostname()
10 print(Name)
11
12 Name2=socket.gethostbyaddr(str(ip))
13 print(Name2)
14
15 port=socket.getservbyport(80)
16 print(port)
17
18 port2=socket.getservbyname("ftp")
19 print(port2)
20
```

user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog

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(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$ python server.py

216.58.211.196

user-HP-Laptop-15-bs1xx

('www.google.com', [], ['216.58.211.196'])

http

21

(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$

# server.py

```
import socket
```

```
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
```

```
Host=socket.gethostname()
```

```
Port=1234
```

```
s.bind((Host,Port))
```

# server.py

```
import socket
```

```
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
```

```
Host=socket.gethostname()
```

```
Port=1234
```

```
s.bind((Host,Port))
```

```
s.listen(5)
```

```
while True:
```

```
    Communication socket,address=s.accept()
```

# server.py

```
s.listen(5)
```

```
while True:
```

```
    Communication socket,address=s.accept()
```

```
    print(f"Connection to {address} established")
```

# server.py

```
s.listen(5)
```

```
while True:
```

```
    Communication socket,address=s.accept()
```

```
    print(f"Connection to {address} established")
```

```
    message=Communication socket.recv( 1024).decode('utf-8')
```

```
    print(f"msg from client : {message} ")
```



# server.py

```
s.listen(5)
while True:
    Communication socket,address=s.accept()

    print(f"Connection to {address} established")

    message=Communication socket.recv( 1024).decode('utf-8')

    print(f"msg from client : {message} ")

    Communication socket.send(("Hi client , I'm server sending u a
msg").encode('utf-8'))

    Communication socket.close()

    print(f"comm ended ")
```

# server.py

```
import socket
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
Host=socket.gethostname()
Port=1234
s.bind((Host,Port))
s.listen(5)
while True:
    Communication_socket,address=s.accept()

    print(f"Connection to {address} established")

    message=Communication_socket.recv( 1024).decode('utf-8')

    print(f"msg from client : {message} ")

    Communication_socket.send(( "Hi client , I'm server sending u a msg" ).encode('utf-8'))

    Communication_socket.close()

    print(f"comm ended ")
```

```
import socket

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
Host=socket.gethostname()
Port=1234
s.bind((Host,Port))

s.listen(5)

while True:
    Communication_socket,address=s.accept()

    print(f"Connection to {address} established")

    message=Communication_socket.recv(1024).decode('utf-8')

    print(f"msg from client : {message} ")

    Communication_socket.send(("Hi client , I'm server sending u a msg").encode('utf-8'))

    Communication_socket.close()

    print(f"comm ended ")
```

# client.py

```
import socket
```

```
socket_client = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
```

```
Host=socket.gethostname()
```

```
Port=1234
```

```
socket_client.connect((Host,Port))
```

```
socket_client.send("Hi server , I'm the Client").encode('utf-8'))
```

```
message=socket_client.recv(1024).decode('utf-8')
```

```
print(f"msg from the server : {message}")
```

```
import socket

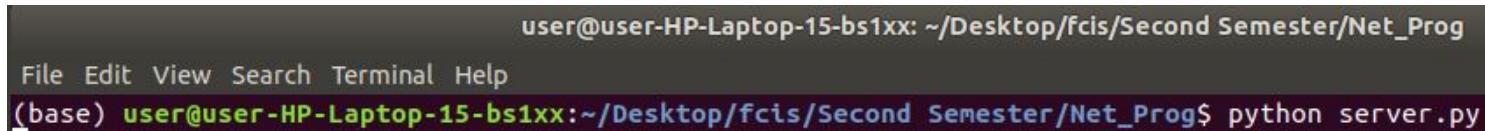
socket_client = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
Host=socket.gethostname()
Port=1234
socket_client.connect((Host,Port))

socket_client.send(("Hi server , I'm the Client").encode('utf-8'))

message=socket_client.recv(1024).decode('utf-8')

print(f"msg from the server : {message}")
```

# RUN : Server.py



A terminal window with a dark background. The title bar at the top reads "user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog". Below the title bar is a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The main area of the terminal shows a prompt "(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net\_Prog\$" followed by the command "python server.py". A white cursor is positioned at the end of the command line.

```
user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net_Prog
File Edit View Search Terminal Help
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$ python server.py
```

# Run : client.py

```
File Edit View Search Terminal Help
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$ python server.py
Connection to ('127.0.0.1', 60674) established
msg from client : Hi server , I'm the Client
comm ended
```

```
user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net_Prog
File Edit View Search Terminal Help
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$ python client.py
msg from the server : Hi client , I'm server sending u a msg
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$
```

# RUN : client.py

```
1
2  import socket
3
4  socket_client = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
5  Host=socket.gethostname()
6  Port=1234
7  socket_client.connect((Host,Port))
8
9  socket_client.send(("Hi server , I'm the Client").encode('utf-8'))
10
11  message=socket_client.recv(1024).decode('utf-8')
12
13  print(f"msg from the server : {message}")
14
```

user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog

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```
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$ python client.py
msg from the server : Hi client , I'm server sending u a msg
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$
```



ne > user > Desktop > fcis > Second Semester > Net\_Prog > server.py

```
0 import socket
1
2 s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
3 Host=socket.gethostname()
4 Port=1234
5 s.bind((Host,Port))
6
7 s.listen(5)
8
9 while True:
10     Communication_socket,address=s.accept()
11
12     print(f"Connection to {address} established")
13
14     message=Communication_socket.recv(1024).decode('utf-8')
15
16     print(f"msg from client : {message} ")
17
18     Communication_socket.send(("Hi client , I'm server sending u a msg").encode('utf-8'))
19
20     Communication_socket.close()
21
22     print(f"comm ended ")
23
```

user@user-HP-Laptop-15-bs1xx: ~/Desktop/fcis/Second Semester/Net\_Prog

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```
(base) user@user-HP-Laptop-15-bs1xx:~/Desktop/fcis/Second Semester/Net_Prog$ python server.py
Connection to ('127.0.0.1', 60674) established
msg from client : Hi server , I'm the Client
comm ended
```