Computer Networks

Computer Assignment   810197644 سیاوش شمس

Sample of code running:

Client side

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Enter your port number : 9090                                  reserved.
b"You are connected from:('127.0.0.1', 9090)"      y                reserved.
Enter your user name(prefix with #):#siavash    Enter your port number : 8080       (venv) C:\Users\Siavash\PycharmProjects\CN_CA>
Your user detail saved as : siavash             b"You are connected from:('127.0.0.1', 8080)"   (venv) C:\Users\Siavash\PycharmProjects\CN_CA>client.py
What do you want to do? 1:list 2:send 3:receive 4:  Enter your user name(prefix with #):#ali      Enter your port number : 7070
exit 1                                          Your user detail saved as : ali                 b"You are connected from:('127.0.0.1', 7070)"
List of users : ['siavash', 'ali', 'reza']      (venv) C:\Users\Siavash\PycharmProjects\CN_CA>client.p   Enter your user name(prefix with #):#reza
What do you want to do? 1:list 2:send 3:receive 4:  y                                           Your user detail saved as : reza
exit abc                                        Enter your port number : 8080                   What do you want to do? 1:list 2:send 3:receive 4:exit 1
Command unknown                                 b"You are connected from:('127.0.0.1', 8080)"   List of users : ['siavash', 'ali', 'reza']
What do you want to do? 1:list 2:send 3:receive 4:  Enter your user name(prefix with #):#ali      What do you want to do? 1:list 2:send 3:receive 4:exit 1
exit 2                                          Your user detail saved as : ali                 List of users : ['siavash', 'ali', 'reza']
Send your message in format [@user:message] @ali:s  What do you want to do? 1:list 2:send 3:receive 4:exit   What do you want to do? 1:list 2:send 3:receive 4:exit 2
alam                                            1                                               Send your message in format [@user:message] @siavash:salam
Message sent succussfuly!                       List of users : ['siavash', 'ali', 'reza']      Message sent succussfuly!
What do you want to do? 1:list 2:send 3:receive 4:  What do you want to do? 1:list 2:send 3:receive 4:exit
exit 3                                          2                                               Message sent succussfuly!
reza: salam                                     Send your message in format [@user:message] @hamed:sal  What do you want to do? 1:list 2:send 3:receive 4:exit 3
What do you want to do? 1:list 2:send 3:receive 4:  am                                          siavash: salam
exit 1                                          User not found                                  What do you want to do? 1:list 2:send 3:receive 4:exit 1
List of users : ['siavash', 'ali', 'reza']      What do you want to do? 1:list 2:send 3:receive 4:exit   List of users : ['siavash', 'ali', 'reza']
What do you want to do? 1:list 2:send 3:receive 4:  3                                           What do you want to do? 1:list 2:send 3:receive 4:exit 2
exit 2                                          siavash: salam                                  Send your message in format [@user:message] @ali:berim baz
Send your message in format [@user:message] @reza:  What do you want to do? 1:list 2:send 3:receive 4:exit   i?
salam khoobi?                                    3                                               Message sent succussfuly!
Message sent succussfuly!                        reza: berim bazi?                               What do you want to do? 1:list 2:send 3:receive 4:exit 1
What do you want to do? 1:list 2:send 3:receive 4:  What do you want to do? 1:list 2:send 3:receive 4:exit   List of users : ['siavash', 'reza']
exit 1                                          1                                               What do you want to do? 1:list 2:send 3:receive 4:exit 1
List of users : ['siavash', 'reza']             List of users : ['siavash', 'ali', 'reza']      List of users : ['reza']
What do you want to do? 1:list 2:send 3:receive 4:  What do you want to do? 1:list 2:send 3:receive 4:exit   What do you want to do? 1:list 2:send 3:receive 4:exit 4
exit 2                                          4
```

Server side

```
(venv) C:\Users\Siavash\PycharmProjects\CN_CA>server.py
User siavash added.
{'siavash': <socket.socket fd=540, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 9090)>}
this is connect

<socket.socket fd=540, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 9090)>
User ali added.
{'siavash': <socket.socket fd=540, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 9090)>, 'ali': <so
cket.socket fd=552, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 8080)>}
this is connect

<socket.socket fd=552, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 8080)>
User reza added.
{'siavash': <socket.socket fd=540, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 9090)>, 'ali': <so
cket.socket fd=552, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 8080)>, 'reza': <socket.socket fd
=556, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 7070)>}
this is connect

<socket.socket fd=556, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 7070)>
shiet
{'siavash': <socket.socket fd=540, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 9090)>, 'reza': <s
ocket.socket fd=556, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 7070)>}
shiet
{'reza': <socket.socket fd=556, family=AddressFamily.AF_INET, type=SocketKind.SOCK_STREAM, proto=0, laddr=('127.0.0.1', 9000), raddr=('127.0.0.1', 7070)>}
{}
```