**Server Code**

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| import socket, threading  class ClientThread(threading.Thread):  def \_init\_(self,clientAddress,clientsocket):  threading.Thread.\_init\_(self)  self.csocket = clientsocket  print ("New connection added: ", clientAddress)  def run(self):  print ("Connection from : ", clientAddress)  #self.csocket.send(bytes("Hi, This is from Server..",'utf-8'))  msg = ''  while True:  data = self.csocket.recv(2048)  msg = data.decode()  if msg=='bye from clientA':  break  print (msg)  self.csocket.send(bytes(msg,'UTF-8'))  print ("Client at ", clientAddress , " disconnected...")  LOCALHOST = "127.0.0.1"  PORT = 8080  server = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)  server.setsockopt(socket.SOL\_SOCKET, socket.SO\_REUSEADDR, 1)  server.bind((LOCALHOST, PORT))  print("Server started")  print("Waiting for client request..")  while True:  server.listen(1)  clientsock, clientAddress = server.accept()  newthread = ClientThread(clientAddress, clientsock)  newthread.start() |

**Client A**

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| import socket  SERVER = "127.0.0.1"  PORT = 8080  client = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)  client.connect((SERVER, PORT))  client.sendall(bytes("This is from Client",'UTF-8'))  while True:  in\_data = client.recv(1024)  print("From Server :" ,in\_data.decode())  out\_data = input()  out\_data += " from clientA"  client.sendall(bytes(out\_data,'UTF-8'))  if out\_data=='bye':  break  client.close() |

**Client B**

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| import socket  SERVER = "127.0.0.1"  PORT = 8080  client = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)  client.connect((SERVER, PORT))  client.sendall(bytes("This is from Client",'UTF-8'))  while True:  in\_data = client.recv(1024)  print("From Server :" ,in\_data.decode())  out\_data = input()  out\_data += " from clientB"  client.sendall(bytes(out\_data,'UTF-8'))  if out\_data=='bye':  break  client.close() |

**Output:**

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| cnlab@cnlab-Precision-Tower-3420:~/DC/prac3$ python3 server.py  Server started  Waiting for client request..  New connection added: ('127.0.0.1', 41954)  Connection from : ('127.0.0.1', 41954)  This is from Client  New connection added: ('127.0.0.1', 51368)  Connection from : ('127.0.0.1', 51368)  This is from Client  New connection added: ('127.0.0.1', 60472)  Connection from : ('127.0.0.1', 60472)  This is from Client  Hiii from clientA  Hello from clientB  How are you? from client   **Client A:**  cnlab@cnlab-Precision-Tower-3420:~/DC/prac3$ python3 clientA.py  From Server : This is from Client  Hiii  From Server : Hiii from clientA    **Client B:**  cnlab@cnlab-Precision-Tower-3420:~/DC/prac3$ python3 clientB.py  From Server : This is from Client  Hello  From Server : Hello from clientB |