CN

ASSIGNEMENT 7

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Roll: 10

AIDS\_A

**Implement Socket programming to create Client and Server to send Hello message.( Implement TCP and UDP Socket)**

**Using TCP**

**Server**

***import* socket**

**s = socket.socket()**

**print('socket created')**

**s.bind(('localhost',9999))**

**s.listen(3)**

**print("waiting for connection")**

***while* True:**

**c,addr = s.accept()**

**name = c.recv(1024).decode()**

**print("connected with",addr,name)**

**c.send(bytes('Hello World','utf-8'))**

**c.close()**

**Client**

***import* socket**

**c = socket.socket()**

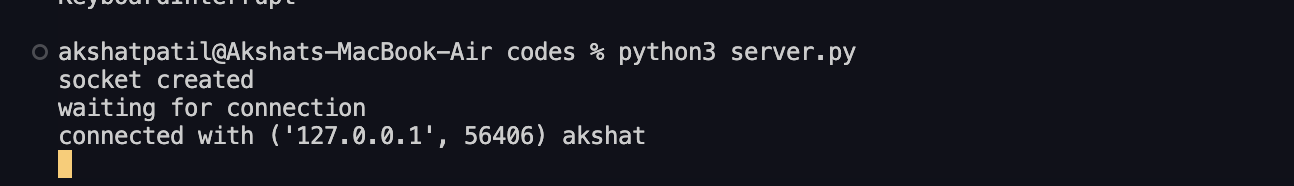
**c.connect(('localhost',9999))**

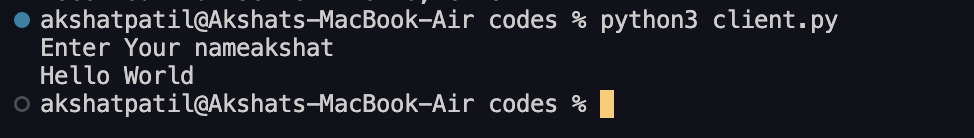
**name = input("Enter Your name")**

**c.send(bytes(name,'utf-8'))**

**print(c.recv(1024).decode())**

**OUTPUT**

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**Using UDP**

**Server**

***import* socket**

**SERVER\_IP = "127.0.0.1"**

**SERVER\_PORT = 12345**

**server\_socket = socket.socket(socket.AF\_INET, socket.SOCK\_DGRAM)**

**server\_socket.bind((SERVER\_IP, SERVER\_PORT))**

**print(f"UDP Server is listening on {SERVER\_IP}:{SERVER\_PORT}...")**

***while* True:**

**message, client\_address = server\_socket.recvfrom(1024)**

**print(f"Received from {client\_address}: {message.decode()}")**

**response = "Hello, Client!"**

**server\_socket.sendto(response.encode(), client\_address)**

**Client**

***import* socket**

**SERVER\_IP = "127.0.0.1"**

**SERVER\_PORT = 12345**

**client\_socket = socket.socket(socket.AF\_INET, socket.SOCK\_DGRAM)**

**message = "Hello"**

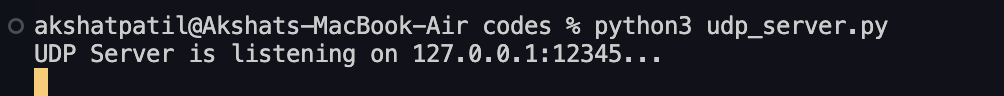
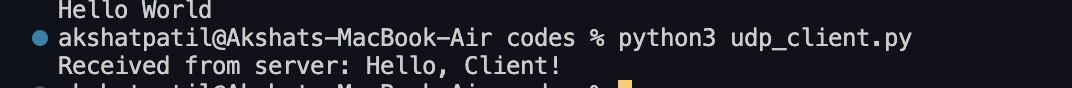
**client\_socket.sendto(message.encode(), (SERVER\_IP, SERVER\_PORT))**

**response, \_ = client\_socket.recvfrom(1024)**

**print(f"Received from server: {response.decode()}")**

**client\_socket.close()**

**Output**

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