Amrita School of Engineering, Coimbatore-641112

Department of Computer Science and Engineering

19CSE301 - COMPUTER NETWORKS

Date :17.08.2021 Time : 1 hour 15minutes

Class: CSE ‘E’ Maximum : 20 Marks

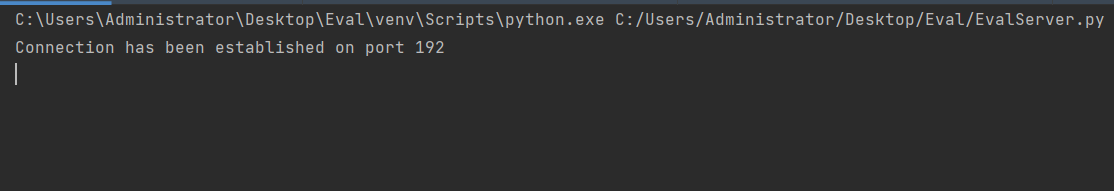
**Server :**

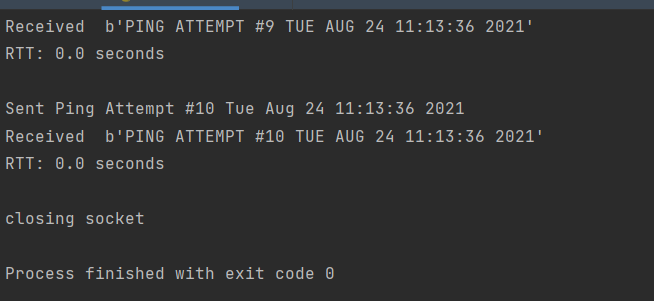
import random  
from socket import \*  
  
serverSocket = socket(AF\_INET, SOCK\_DGRAM)  
serverSocket.bind(('', 192))  
print("Connection has been established on port 192 ")  
while True:  
 r = random.randint(0, 10)  
 message, address = serverSocket.recvfrom(1024)  
 message = message.upper()  
 if r < 4:  
 continue  
 serverSocket.sendto(message, address)

**Client :**

import socket  
import time  
  
sock = socket.socket(socket.AF\_INET, socket.SOCK\_DGRAM)  
ping\_address = ('localhost', 192)  
sock.settimeout(1)  
  
try:  
 for i in range(1, 11):  
 start = time.time()  
 message = 'Ping Attempt #' + str(i) + " " + time.ctime(start)  
 try:  
 sent = sock.sendto(message.encode(), ping\_address)  
 print("Sent " + message)  
 data, server = sock.recvfrom(4096)  
 print("Received ", data)  
 end = time.time()  
 elapsed = end - start  
 print("RTT: " + str(elapsed) + " seconds\n")  
 except socket.timeout:  
 print("Attempt #" + str(i) + ": Requested Time out\n")  
finally:  
 print("closing socket")  
 sock.close()

**Output :**

****

****