RDT3.0

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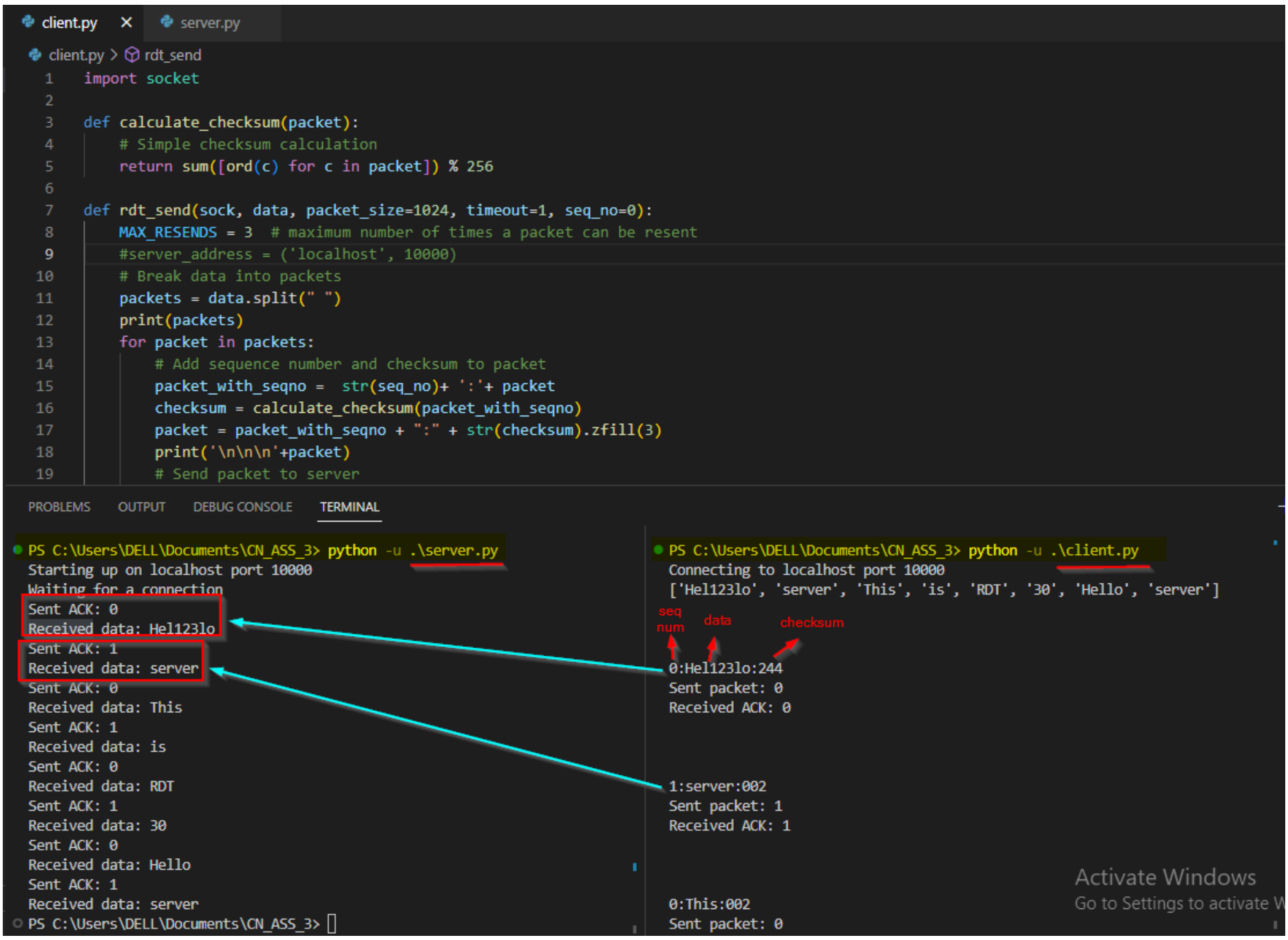
Packets are being sent without Delay.



Adding delay when sending ACK.

client.py server.py

server.py > rdt_recv

```
            packet_seq_no = int(packet_seq_no)
            # Check if received packet has the expected sequence number
            if packet_seq_no == seq_no:
                # Check checksum
                if packet_checksum != calculate_checksum(str(packet_seq_no) + ":" + packet_data):
                    print("Received packet with invalid checksum. Discarding packet.")
                    continue
                # Send ACK
                ack = "ACK:" + str(seq_no) + ":" + str(calculate_checksum("ACK:" + str(seq_no)))
                time.sleep(5)  added delay, when sending ack
                connection.send(ack.encode())
                print("Sent ACK:", seq_no)
                # Update sequence number
                seq_no = 1 - seq_no
                # Update last_seq_no
                last_seq_no = packet_seq_no
                # Return data
                return packet_data
            elif packet_seq_no <= last_seq_no:
                # Discard old packet
                print(packet)
                print("Received old packet. Discarding packet.")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\DELL\Documents\CN_ASS_3> python -u .\server.py
Starting up on localhost port 10000
Waiting for a connection
Sent ACK: 0
Received data: Hel123lo
Traceback (most recent call last):
  File "C:\Users\DELL\Documents\CN_ASS_3\server.py", line 81, in <module>
    main()
  File "C:\Users\DELL\Documents\CN_ASS_3\server.py", line 70, in main
    data = rdt_recv(connection,seq_no)
  File "C:\Users\DELL\Documents\CN_ASS_3\server.py", line 13, in rdt_recv
    packet = connection.recv(packet_size)
ConnectionAbortedError: [WinError 10053] An established connection was abo
rted by the software in your host machine
PS C:\Users\DELL\Documents\CN_ASS_3>
```

```
PS C:\Users\DELL\Documents\CN_ASS_3> python -u .\client.py
Connecting to localhost port 10000
['Hel123lo', 'server', 'This', 'is', 'RDT', '30', 'Hello', 'se

                                   timeout
0:Hel123lo:244
Sent packet: 0
Timeout: Resending packet (1/3): 0
Sent packet: 0
Timeout: Resending packet (2/3): 0
Sent packet: 0
Timeout: Resending packet (3/3): 0
Sent packet: 0
Max resends (3) reached. Aborting transmission.
PS C:\Users\DELL\Documents\CN_ASS_3>
```