

PROGRAMMING ASSIGNMENT

Pre-requisites:

Install gcc for C program compiler

Steps:

1. Copy the files 'client.c', 'server.c' and 'packet_payload.txt' to the desired location.
2. Run the below commands to compile the C programs:

```
gcc server.c -o server
```

```
gcc client.c -o client
```

3. First the server should be started. To start the server, run:

```
./server
```

4. In a new terminal window, run below for running the client program:

```
./client
```

5. Packets would start transmitting and output would be visible

At the client side, a user menu with options for different type of packets to be sent to server/AP is displayed.

```

C client.c M  payload.txt M  C server.c M X
C server.c > main()
147 int main() {
172     cliaddr.sin_port = htons(PORT);
173     cliaddr.sin_addr.s_addr = htonl(INADDR_ANY);
174     bind(socket_fd, (struct sockaddr *)&cliaddr, sizeof(cliaddr));
175     printf("Server started successfully.....\n");
176
177     while(1)
178     {
PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./server
Server started successfully.....
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client
*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)
-----
1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify PCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames

```

Then as per the options selected, the client sends a packet to the server and the server responds accordingly.

1. Association Request and Response

```

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./server
Server started successfully.....

Packet recieved from client.....

-----Packet Information-----
Address 1: AABBCDDEED0
Address 2: 1245CCDDEE88
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 3658527952
Duration ID: 0
Sequence Control: 0

*****
Sending Association Response...

Response sent with correct FCS:

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEED0
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 1
FCS: 751588294
Duration ID: 43981
Sequence Control: 0

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
1
Sending Association Request to Server.....

-----Packet Information-----
Address 1: AABBCDDEED0
Address 2: 1245CCDDEE88
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 3658527952
Duration ID: 0
More Fragments: 1
Sequence Control: 0

Response from Server : Received frame with valid FCS.

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEED0
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 1
FCS: 751588294
Duration ID: 43981
More Fragments: 0
Sequence Control: 0

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %

```

2. Probe Request and Response

```

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEED0
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 1
FCS: 751588294
Duration ID: 43981
Sequence Control: 0

Packet recieved from client.....

-----Packet Information-----
Address 1: AABBCDDEED0
Address 2: 1245CCDDEE88
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 4
FCS: 4147558183
Duration ID: 0
Sequence Control: 0

*****
Sending Probe Response...

Response sent with correct FCS:

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEED0
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 1326819792
Duration ID: 43981
Sequence Control: 0

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
2
Sending Probe Request to Server.....

-----Packet Information-----
Address 1: AABBCDDEED0
Address 2: 1245CCDDEE88
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 4
FCS: 4147558183
Duration ID: 0
More Fragments: 0
Sequence Control: 0

Response from Server : Received frame with valid FCS.

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEED0
Address 3: AABBCDDEED0
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 1326819792
Duration ID: 43981
More Fragments: 0
Sequence Control: 0

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %

```

3. RTS and CTS

```

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 1326819792
Duration ID: 43981
Sequence Control: 0

-----
Packet recieved from client.....
-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 3496362946
Duration ID: 4
Sequence Control: 0

-----
Sending CTS Response...

Response sent with correct FCS:
-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 939514320
Duration ID: 3
Sequence Control: 0

-----
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
3
Sending RTS Request to Server.....

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 3496362946
Duration ID: 4
More fragments: 0
Sequence Control: 0

-----
Response from Server : Received frame with valid FCS.

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 939514320
Duration ID: 3
More fragments: 0
Sequence Control: 0

-----
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %

```

4. Data Packet and ACK

```

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 939514320
Duration ID: 3
Sequence Control: 0

-----
Packet recieved from client.....
-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 1445185676
Duration ID: 2
Sequence Control: 0

-----
Sending ACK Response...

Response sent with correct FCS:
-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 631261968
Duration ID: 1
Sequence Control: 0

-----
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
4
Sending Data Packet to Server.....

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 1445185676
Duration ID: 2
More fragments: 1
Sequence Control: 0

-----
Response from Server : Received frame with valid FCS.

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 631261968
Duration ID: 1
More fragments: 0
Sequence Control: 0

-----
neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %

```

5. FCS Error Handling

```

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE TERMINAL CODE REFERENCE LOG
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 4294967295
Duration ID: 29484
Sequence Control: 0

*****
Error: FCS (Frame Check Sequence) Error.
*****
Packet recieved from client.....

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 770302671
Duration ID: 2
Sequence Control: 0

*****
Sending ACK Response...
*****
Response sent with correct FCS:

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 1564515202
Duration ID: 1
Sequence Control: 0

*****
Packet recieved from client.....

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 4294967295
Duration ID: 29484
Sequence Control: 0

*****
Error: FCS (Frame Check Sequence) Error.
*****

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client
*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)
-----
1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
5
Data Packet sent to Server.....

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 770302671
Duration ID: 2
More Fragments: 0
Sequence Control: 0

*****
Response from Server : ACK received for valid frame

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCCDDEEDD
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 1564515202
Duration ID: 1
More Fragments: 0
Sequence Control: 0

*****
Sending Invalid data packet request

-----Packet Information-----
Address 1: AABBCCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCCDDEEDD
Address 4: 000000000000
Type: 0
Sub Type: 0
FCS: 4294967295
Duration ID: 29484
More Fragments: 0
Sequence Control: 0

```

6. Sending multiple fragmented frames

CSEN 331 Wireless and Mobile Networks

[PROBLEMS](#)
[OUTPUT](#)
[PORTS](#)
[COMMENTS](#)
[DEBUG CONSOLE](#)
[TERMINAL](#)
[CODE REFERENCE LOG](#)

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CSEN 331 Wireless and Mobile Networks

```
PROBLEMS OUTPUT PORTS COMMENTS DEBbug CONSOLE TERMINAL CODE REFERENCE LOG

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEED8
Address 2: 1245CDDDEE88
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 2238093151
Duration ID: 9
Sequence Control: 35
*****
Sending ACK Response...

Response sent with correct FCS:

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: 1245CDDDEE88
Address 2: AABBCDDEED8
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 737090887
Duration ID: 0
Sequence Control: 35
Packet recieved from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEED8
Address 2: 1245CDDDEE88
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 2980966415
Duration ID: 8
Sequence Control: 36
*****
Sending ACK Response...

Response sent with correct FCS:

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: 1245CDDDEE88
Address 2: AABBCDDEED8
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 2389543916
Duration ID: 7
Sequence Control: 36
Packet recieved from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEED8
Address 2: 1245CDDDEE88
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 94557951
Duration ID: 12
More Fragments: 0
Sequence Control: 0

Response from Server : CTS frame recieved from server.....

-----Packet Information-----
Address 1: 1245CDDDEE88
Address 2: AABBCDDEED8
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 3865187411
Duration ID: 11
More Fragments: 0
Sequence Control: 0

*****
Sending Fragmented Frames to server.....
Total fragmented frames sent: 10

o neha@nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)
-----
1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
6
RTS frame sent to server....

-----Packet Information-----
Address 1: AABBCDDEED8
Address 2: 1245CDDDEE88
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 94557951
Duration ID: 12
More Fragments: 0
Sequence Control: 0

Response from Server : CTS frame recieved from server.....

-----Packet Information-----
Address 1: 1245CDDDEE88
Address 2: AABBCDDEED8
Address 3: AABBCDDEED8
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 3865187411
Duration ID: 11
More Fragments: 0
Sequence Control: 0

*****
Sending Fragmented Frames to server.....
Total fragmented frames sent: 10

o neha@nehas-MacBook-Pro-2 UDP_SocketProgramming %
```

```
PROBLEMS OUTPUT PORTS COMMENTS DEBU CONSOLE TERMINAL CODE REFERENCE LOG
Address 2: 1245CDD0EE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 507068191
Duration ID: 2
Sequence Control: 69
*****
Sending ACK Response...

Response sent with correct FCS:

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: 1245CDD0EE88
Address 2: AABBCDDEEDD
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 13
FCS: 3875573843
Duration ID: 1
Sequence Control: 69
-----
Packet received from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEEDD
Address 2: 1245CDD0EE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 454682498
Duration ID: 6
Sequence Control: 707
*****
No ACK Received for Frame: ERROR OUT OF SEQUENCE.
-----
Packet received from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: 00004567EBD0
Address 2: 1245CDD0EE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 3812797767
Duration ID: 2
Sequence Control: 72
*****
No ACK Received for Frame: ERROR INCORRECT MAC ADDRESS.
-----
Packet received from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEEDD
Address 2: 1245CDD0EE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 94557551
Duration ID: 12
More Fragments: 0
Sequence Control: 0
-----

Response from Server : CTS frame recieved from server.....

-----Packet Information-----
Address 1: 1245CDD0EE88
Address 2: AABBCDDEEDD
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 3865187411
Duration ID: 11
More Fragments: 0
Sequence Control: 0
-----

*****
Sending Fragmented Frames to server.....
Total fragmented frames sent: 10
*****

naha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client

*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)
-----
1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
6
RTS frame sent to server....

-----Packet Information-----
Address 1: AABBCDDEEDD
Address 2: 1245CDD0EE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 94557551
Duration ID: 12
More Fragments: 0
Sequence Control: 0
-----

naha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %
```

4 error fragmented frames

PROBLEMS OUTPUT PORTS COMMENTS DEBUG CONSOLE **TERMINAL** CODE REFERENCE LOG

```

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 2871177440
Duration ID: 6
Sequence Control: 707
*****
No ACK Received for Frame: ERROR OUT OF SEQUENCE.
-----
Packet recieved from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: 000045678900
Address 2: 1245CCDDEE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 3812797767
Duration ID: 2
Sequence Control: 72
*****
No ACK Received for Frame: ERROR INCORRECT MAC ADDRESS.
-----
Packet recieved from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 65535
Address 1: AABBCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 1478994553
Duration ID: 4
Sequence Control: 707
*****
No ACK Received for Frame: ERROR DUPLICATE FRAME.
-----
Packet recieved from client.....

-----Packet Information-----
Start of Packet: 65535
End of Packet: 0
Address 1: AABBCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 1002697968
Duration ID: 2
Sequence Control: 74
*****
No ACK Received for Frame: ERROR END OF PACKET MISSING.
-----

```

```

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client
*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

```

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames

```

RTS frame sent to server....

```

```

-----Packet Information-----
Address 1: AABBCDDEEDD
Address 2: 1245CCDDEE88
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 11
FCS: 2770572510
Duration ID: 12
More Fragments: 0
Sequence Control: 0

```

```

Response from Server : CTS frame recieved from server.....

```

```

-----Packet Information-----
Address 1: 1245CCDDEE88
Address 2: AABBCDDEEDD
Address 3: AABBCDDEEDD
Address 4: 000000000000
Type: 1
Sub Type: 12
FCS: 3865187411
Duration ID: 11
More Fragments: 0
Sequence Control: 0

```

```

*****
Sending fragmented frames to server.....
Total fragmented frames sent: 10

```

```

neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming %

```

After ack_timer and retry_counter runs out, error message is displayed:

```

PROBLEMS  OUTPUT  PORTS  COMMENTS  DEBUG CONSOLE  TERMINAL  CODE REFERENCE LOG
○ neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % 
1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
4
Sending Data Packet to Server.....
-----Packet Information-----
Address 1: AABBCODEEDD
Address 2: 1245CCODEE88
Address 3: AABBCODEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 3311318129
Duration ID: 2
More fragments: 0
Sequence Control: 0

Response from Server : ERROR Server does not respond
Sending Packet Again.....
Sending Data Packet to Server.....
-----Packet Information-----
Address 1: AABBCODEEDD
Address 2: 1245CCODEE88
Address 3: AABBCODEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 3311318129
Duration ID: 2
More fragments: 0
Sequence Control: 0

Response from Server : ERROR Server does not respond
Sending Packet Again.....
Sending Data Packet to Server.....
-----Packet Information-----
Address 1: AABBCODEEDD
Address 2: 1245CCODEE88
Address 3: AABBCODEEDD
Address 4: 000000000000
Type: 2
Sub Type: 0
FCS: 3311318129
Duration ID: 2
More fragments: 0
Sequence Control: 0

Response from Server : ERROR Server does not respond
Sending Packet Again.....
ERROR : No ACK received from AP
○ neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % 

```

If user enters a wrong option, the client throws an error and exits.

```

PROBLEMS  OUTPUT  PORTS  COMMENTS  DEBUG CONSOLE  TERMINAL  CODE REFERENCE LOG
○ neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./server
Server started successfully.....
○ neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % ./client
*****
Choose the type of message to send from client to server.
Enter the option number (1, 2, 3, 4, 5 or 6)

1. Association Request
2. Probe Request
3. RTS Request
4. Data Request
5. Verify FCS Error Handling on Faulty Data Request Packet.
6. Send Multiple Frames
8

ERROR Retry again with correct option
○ neha@Nehas-MacBook-Pro-2 UDP_SocketProgramming % 

```