Computer Networks – Shannon Rhodes – Lab 2 - 3/18/15

Everything specified for Lab 2 functions properly. There were two errors from Lab 1 that I fixed for Lab 2. The first was I removed the end of file characters. The second was I added the sequence numbers field. In this lab we added the Lframe field, the ability to stuff/de-stuff ASCII characters and the checksum error detection.

**Test1 – no ASCII characters – checkSum highlighted in yellow**

Layer 4: Transmit data from file name = sendfile.txt

Layer 4: Transmit new data buffer= this is a small amount

Layer 3: Transmit receiving buffer = this is a small amount

Layer 3: Transmit new buffer: 0000000000000000000000000000000000000000this is a small amount

Layer 2: Transmit input buffer: 0000000000000000000000000000000000000000this is a small amount

Layer 2: Transmit new buffer:

0082001000000000000000000000000000000000000000000000000this is a small amount09170Layer 1: Transmit input buffer: 0082001000000000000000000000000000000000000000000000000this is a small amount09170

Layer 1: Transmit output buffer: 0082001000000000000000000000000000000000000000000000000this is a small amount09170

Layer 4: begin receive

Layer 1: Receive input buffer: 0082001000000000000000000000000000000000000000000000000this is a small amount09170

Layer 1: Receive output buffer 0082001000000000000000000000000000000000000000000000000this is a small amount09170

Layer 2: Receive input buffer 0082001000000000000000000000000000000000000000000000000this is a small amount09170

Layer 2: Receive new buffer:

Checksum successful

0000000000000000000000000000000000000000this is a small amount

Layer 3: Receive receiving buffer: 0000000000000000000000000000000000000000this is a small amount

Layer 3: Receive new buffer: this is a small amount

Layer 4: receiving buffer: this is a small amount

Writing to file: this is a small amount

**Test 2 – ASCII characters example –** I used a paragraph of Professor Kulkarni's test file. His full file is very long but the same things are demonstrated in this shorter example. I have print screens of my output below after the text. The text shows the highlighted stuffed ASCII characters and checksum.

Layer 4: Transmit data from file name = sendfile.txt

Layer 4: Transmit new data buffer= #In what distant deeps or skies

Burnt the ###fire of thine eyes?

#On what wings dare he aspire?

What the hand dare seize the fire?

Layer 3: Transmit receiving buffer = #In what distant deeps or skies

Burnt the ###fire of thine eyes?

#On what wings dare he aspire?

What the hand dare seize the fire?

Layer 3: Transmit new buffer: 0000000000000000000000000000000000000000#In what distant deeps or skies

Burnt the ###fire of thine e0000000000000000000000000000000000000000yes?

#On what wings dare he aspire?

What the hand dare seize0000000000000000000000000000000000000000 the fire?

Layer 2: Transmit input buffer: 0000000000000000000000000000000000000000#In what distant deeps or skies

Burnt the ###fire of thine e0000000000000000000000000000000000000000yes?

#On what wings dare he aspire?

What the hand dare seize0000000000000000000000000000000000000000 the fire?

Layer 2: Transmit new buffer:

0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e72950

0121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize72600

0070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 1: Transmit input buffer: 0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e729500121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize726000070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 1: Transmit output buffer: 0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e729500121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize726000070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 4: begin receive

Layer 1: Receive input buffer: 0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e729500121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize726000070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 1: Receive output buffer 0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e729500121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize726000070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 2: Receive input buffer 0124000000000000000000000000000000000000000000000000000##In what distant deeps or skies

Burnt the ######fire of thine e729500121010000000000000000000000000000000000000000000000000yes?

##On what wings dare he aspire?

What the hand dare seize726000070021000000000000000000000000000000000000000000000000 the fire?26820

Layer 2: Receive new buffer:

Checksum successful

0000000000000000000000000000000000000000#In what distant deeps or skies

Burnt the ###fire of thine e

Checksum successful

0000000000000000000000000000000000000000yes?

#On what wings dare he aspire?

What the hand dare seize

Checksum successful

0000000000000000000000000000000000000000 the fire?

Layer 3: Receive receiving buffer: 0000000000000000000000000000000000000000#In what distant deeps or skies

Burnt the ###fire of thine e0000000000000000000000000000000000000000yes?

#On what wings dare he aspire?

What the hand dare seize0000000000000000000000000000000000000000 the fire?

Layer 3: Receive new buffer: #In what distant deeps or skies

Burnt the ###fire of thine eyes?

#On what wings dare he aspire?

What the hand dare seize the fire?

Layer 4: receiving buffer: #In what distant deeps or skies

Burnt the ###fire of thine eyes?

#On what wings dare he aspire?

What the hand dare seize the fire?

Writing to file: #In what distant deeps or skies

Burnt the ###fire of thine eyes?

#On what wings dare he aspire?

What the hand dare seize the fire?



