

Name: \_\_\_\_\_

Section: 2003 4001 4004 6002

**HW #6**

IC 322 – Computer Networks

Due: 27 Sep

This homework assignment is to be completed individually. You may ask your classmates for help, but **all work must be your own**. You may use Wikipedia or any other website as a reference. Names and descriptions may be copied directly from the website. All answers must be hand-written – typed answers will not be accepted.

The purpose of this homework is to familiarize you with two of the most important Transport-Layer protocols. You will not understand most of the fields in the headers yet. That is okay.

Fill in the name and a short description for each field in the UDP packet.

This site is a good reference: [http://en.wikipedia.org/wiki/User\\_Datagram\\_Protocol](http://en.wikipedia.org/wiki/User_Datagram_Protocol)

Byte	0								1								2								3							
Bit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0	A																B															
32	C																D															
64+	E																															

- A. Source port – identifies the sending port
- B.
- C.
- D.
- E.

Fill in the table below showing the range of unsigned integer values that can be represented by different sizes of binary numbers:

Number of bits	Range of integer values
1	
2	
4	
8	0 - 255
16	
32	

Fill in the name and a short description for each field in the TCP header.

This site is a good reference: [http://en.wikipedia.org/wiki/Transmission\\_Control\\_Protocol](http://en.wikipedia.org/wiki/Transmission_Control_Protocol)

Byte	0							1							2							3										
Bit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0	A														B																	
32	C																															
64	D																															
96	E			F			G	H	I	J	K	L	M	N	O	P																
128	Q														R																	
160 ...	S																															

- A.
- B.
- C.
- D.
- E.
- F.
- G.
- H.
- I.
- J.
- K.
- L.
- M.
- N.
- O.
- P.
- Q.
- R.
- S.