

Panel 1

Changes to Specs for HW:

op-codes: REQUEST = 10  
 Answer = 20  
 Add = 11  
 Subtract = 12

} must be in 1<sup>st</sup> byte of Datagram packet

Client / Server need to send / receive on different ports

Server sends on 1235  
 server listens on 1234

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Panel 2

All About encoding.

	-128, -128, -126		-128 -127 -100
	+128 ↓ ↓ ↓		↓ ↓ ↓
	0 0 2		0 1 28
8-bit	↓ ↓ ↓		↓ ↓
	<u>00000000</u> , 00000000 00000010		00000000 00000001 <u>00011100</u>
	↓		↓
to integer	2		to int: 256 + 28 = <u>284</u>

  

32	16	8	4	2	1
		1	1	1	00

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Panel 3

Methods:

String intToBits(int i) ← pre:  $0 \leq i \leq 2^{24} - 1$   
use recursion

int bitsToInt(String s) ← pre:  $s.length() \leq 24$   
 easy, simple loop

byte[] intToBytes(int i)  
 int bytesToInt(byte[] bytes)

Note: intToBits(3) = 11 needs padding

String intToNBits(int i, int N) ← returns N bits using padding

010101

Due Monday!!!

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Panel 4

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