Proposed Protocol for Lab 1.2

Request Message

Operation Code	Operand A	Operand B
1 bytes '+' = 0x2b (43) '-' = 0x2d (45) 'x' = 0x78 (120) '/' = 0x2f (47)	4 bytes (unsigned integer)	4 bytes (unsigned integer)

- The total request message length will always be nine bytes.
- Each operand is an unsigned 32-bit integer.
- The standard UTF-8 character values are used to convert the operation code into a hex value (decimal equivalent given in parenthesis).

Response Message

Operation Code	Operand A	Operand B	Answer	Is Answer Valid
1 bytes '+' = 0x2b (43) '-' = 0x2d (45) 'x' = 0x78 (120) '/' = 0x2f (47)	4 bytes (unsigned integer)	4 bytes (unsigned integer)	4 bytes (unsigned integer)	1 byte 1 – Valid 2 – Invalid (NaN result)

- The total response message length will always be fourteen bytes.
- The result is an unsigned 32-bit integer.
- Is Answer Valid will take care of NaN / divide by zero situations. (If the answer is invalid, the answer field should be set to 0).
- The answer is unsigned, because the operands were specified as unsigned in the specifications for the lab. Please see (http://stackoverflow.com/questions/7221409/is-unsigned-integer-subtraction-defined-behavior) for more information on possible implications of unsigned arithmetic.