ARM Lab #3

Your program will implement a (somewhat) higher level language instruction that moves data directly from memory to memory.

We won' t really be parsing this instruction here, but you can assume that if we had bothered to write a parser, that the instruction that we would parse would look something like:

COPYDATA address1, address2, length

We will assume that the parsing has already taken place, and that the value of address 1 is in R0, the value of address 2 is in R1, and the value of length is in R2. To "simulate" this, you will read address1, address2, and the length in from the console. The data to be copied is located at address1 and the location where the data will be copied to is pointed to by address2.

Your program should display memory at address1 before the COPYDATA takes place, then it should prompt the user for address1 and address2 and stuff those values into the correct registers. Then it should perform the COPYDATA, and finally it should display memory at address2 after the COPYDATA has taken place.

You will have to stuff some appropriate data in at address1 and address2 prior to running your program so you can adequately illustrate that the COPYDATA is really working.