

1. Write ARM 7 assembly language code that would
 - a. Add two 8 bit numbers.
 - b. Multiply a number by 8 without using the MULT instruction.
 - c. Set the zero flag if two 8 bit numbers are the same and save the number to memory address 0x10C.
2. Write a section of ARM 7 assembly language that would write the 32 bit word 0x390DE7A3 into a memory address, subtract 0x7D23 from it, and then save the result in memory address 0x108. Make sure you comment every line of your code.
3. Discuss what is meant by the terms: fetch, decode and execute.
4. What is the purpose of the program counter?
5. Explain the role of the stack and the purpose of the stack pointer.
6. Explain what each of the four flags in the ARM7 processor indicate if set.
7. How would you use the flags?
8. Briefly explain the concept of cache memory and why it is used.