

### HW 3

For the following questions remember to consult the Thumb2 assembly language and address modes document.

2. How does the word 0xdec0ded1 appear in memory in a little-endian memory system and a big-endian memory system.

Address	Little-Endian	Big-Endian
n		
n+1		
n+2		
n+3		

3. Assuming that SP is 0x0000\_2220 initially, what is its value after executing the instruction PUSH {r0,r2}?
4. Write the Thumb code to subtract 1000 from the contents of register r6, using r3 as a temporary register.
5. Write the Thumb code to multiply the two 32-bit in memory at addresses 0x1234\_5678 and 0x7894\_5612, storing the result in address 0x2000\_0010.
6. Why would you use a BL instruction rather than a BLX instruction?