Study Questions (Chapter 03 – Part C)

- 1. Question 3.34 on page 225: What is the effect of executing STMIB **r13!**, {r0-r2, r4}? Draw a picture of the state of the stack pointed at by r13 before and after this operation.
- 2. Question 3.35 on page 225: The two pairs of instructions LDMIA, STMDB and LDMFD, STMFD do exactly the same things. Why do these two pairs have different or *alternative* mnemonics? Why does the first pair have different suffixes IA and DB? Why does the second pair have the same suffix FD?
- 3. Question 3.57 on page 226: We need to swap the following registers. Do this using block moves.

Before	After
r1	r3
r2	r4
r3	r5
r4	r6
r5	r7
r6	r1
r7	r2