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

1. 将 r0~r12, r14 14个寄存器存于 r13中并更新 r13的值.