

Study Questions (Chapter 03 – Part D)

1. Write an ARM LDM/STM with FD/FA/ED/EA notation with updating the base register for some register list.
a) Encode this instruction to machine language.
b) Use the ARM simulator to verify that your answer is correct.
c) Decode the generated machine language instruction to generate the original assembly instruction.
2. Write an ARM LDM/STM with FD/FA/ED/EA notation without updating the base register for some register list.
a) Encode this instruction to machine language.
b) Use the ARM simulator to verify that your answer is correct.
c) Decode the generated machine language instruction to generate the original assembly instruction.
3. Write an ARM LDM/STM with IA/IB/DA/DB notation with updating the base register for some register list.
a) Encode this instruction to machine language.
b) Use the ARM simulator to verify that your answer is correct.
c) Decode the generated machine language instruction to generate the original assembly instruction.
4. Write an ARM LDM/STM with IA/IB/DA/DB notation without updating the base register for some register list.
a) Encode this instruction to machine language.
b) Use the ARM simulator to verify that your answer is correct.
c) Decode the generated machine language instruction to generate the original assembly instruction.