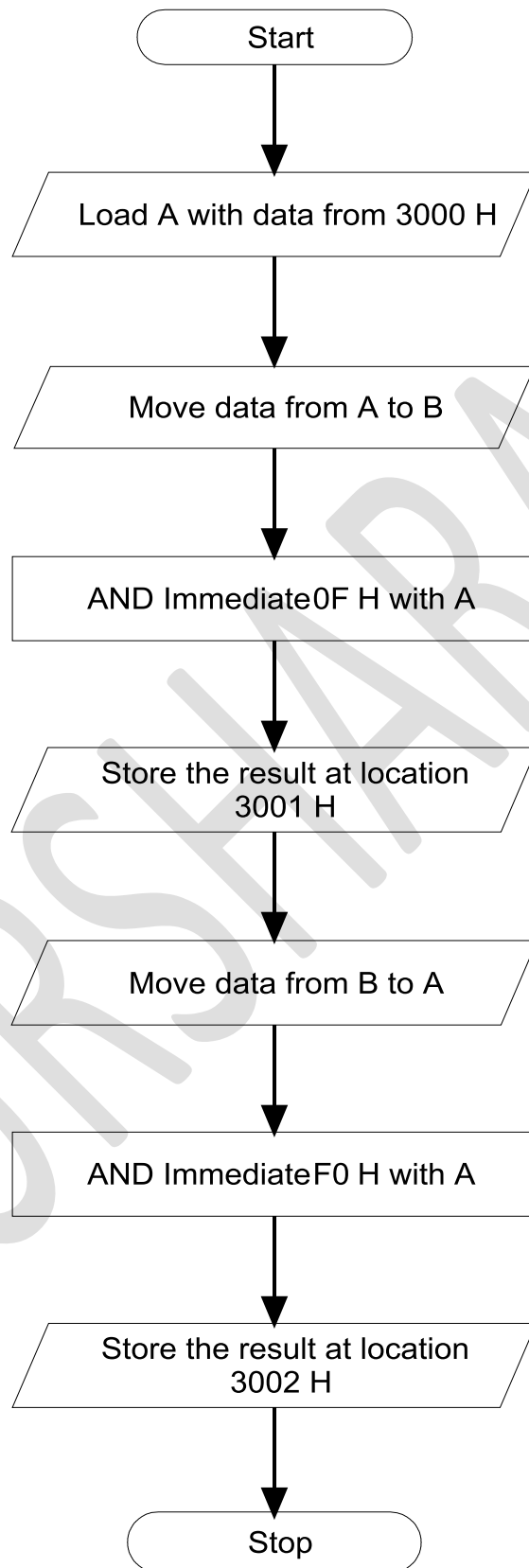


Flow Chart to Divide a Byte into Two Nibbles



Program to Divide a Byte into Two Nibbles

Address	Mnemonics	Operand	Opcode	Remarks
2000	LDA	3000 H	3A	Load A with data from 3000 H
2001			00	
2002			30	
2003	MOV	B, A	47	Move data from A to B
2004	ANI	0F H	E6	AND Immediate 0F H with A
2005			0F	
2006	STA	3001 H	32	Store the result at location 3001 H
2007			01	
2008			30	
2009	MOV	A, B	78	Move data from B to A
200A	ANI	F0 H	E6	AND Immediate F0 H with A
200B			F0	
200C	STA	3002 H	32	Store the result at location 3002 H
200D			02	
200E			30	
200F	HLT		76	Halt

Before Execution:

3000: 45 H

After Execution:

3001: 05 H

3002: 40 H