

Program 7

Write program to find 2's complement of a 5 byte data located at 2000H and store the result at 5000H.

Address	Label	OPCode	OPerand	Comment
8000H		LXI	H, 2000H	Load immediate the source starting address 2000h in HL pair
8003H		LXI	D, 5000H	Load immediate the destination starting address 5000h in DE pair
8006H		MVI	C, 05H	Move immediate the block size 5 to C.
8008H		STC		set carry flag to 1.
8009H	LOOP	MOV	A, M	Move the byte pointed by HL pair to A
800AH		CMA		Complement accumulator content.
800BH 800EH		JNC INR	SKIP A	Jump to next next instruction when carry flag is 0.
8010H	SKIP	STAX	D	Store accumulator data to the location pointed by DE pair
8011H		INX	H	increment HL pair
8012H		INX	D	increment DE pair
8013H		DCR	C	decrement C.
8014H		JNZ	LOOP	Jump to 5 th instr. when C is not zero.
8017H		HLT		Halt