Program 14:

write a program to convert a BCD no., located at 201FH, into ~~int~~ it's binary equivalent and store the ~~result~~ result in 2020H.

Address	Label	OPCode	Operand	Comments
8000		LDA	201Fh	Load the BCD content into the accumulator
8003		MOV	B, A	Backup the data in register B.
8004		ANI	0Fh	And immediate with 0Fh to get BCD_2
8006		MOV	C, A	Move BCD_2 into register C.
8007		MOV	A, B	Get the backup data from register B
8008		ANI	F0h	And immediate with F0h to get BCD_1
800A		JNZ	SKIP	Jump to SKIP if BCD_1 is zero.
800D 800E 800F 8010		RRC RRC RRC RRC		Rotate right with carry x4 to get BCD_1 to the rightmost nibble.
8011		MOV	D, A	Keep the BCD_1 in register D.
8012		XRA	A	A⊕A, to init A with 0.

Address	Label	OPCode	OPerand	Comments
8013		MVI	E, 0Ah	initialize register E with 0Ah or $(10)_{10}$
8015	SUM	ADD	D	Add value of D (for 10 times) into A.
8016		DCR	E	Decrement E.
8017		JNZ	SUM	Jump to Sum until E is zero.
801A	SKIP	ADD	C	Add to accumulator BCD_2 kept in C.
801B		STA	2020h	Store the binary equivalent at location 2020h
801E		HLT		Halt