Program 15

Write a Program to convert binary no., located at 2005h, into its BCD equivalent and store result from 2055h onwards.

Address	Label	OP Code	OPerand	Comments
8000		LXI	H, 2005	Load immediate HL pair with location 2005h
8003		MOV	A, M	mov the content pointed by HL pair into A.
8004		CALL	TENET	Call subroutine TENET
8007		HLT		Halt
8008	TENET	LXI	H, 2055h	Load immediate HL pair with 2055h
800B		MVI	B, 64h	Move immediate 64h or $(100)_{10}$ into register B.
800D		CALL	BINBCD	Call subroutine BINBCD
8010		MVI	B, 0Ah	Move into B 0Ah of $(10)_{10}$
8012		CALL	BINBCD	Call subroutine BINBCD
8015		MOV	M A	Move A's value into a location pointed by HL
8016		RET		Return of TENET
8017	BINBCD	MVI	M, FFh	Initialize m with FFh
8019	NXT	INR	M	Increment to count place value
801A		SUB	B	Subtract A from B
801B		JNC	NXT	Jump to carry until NXT
801E		ADD	B	Add back B to A
801F		INX	H	increment HL pair
8020		RET		~~Halt~~ Return of BINBCD