

Program 7

Program to implement multiplication by successive addition method

LXI H,8000H			Load first operand address
MOV B, M			Store first operand to B
F004	23		INX H Increase HL pair
F005	AF		XRA A Clear accumulator
F006	4F		MOV C, A Store 00H at register C
F007	86	LOOP	ADD M Add memory element with Acc
F008	D2, 0C, F0		JNC SKIP When Carry flag is 0, skip next task
F00B	0C		INR C Increase C when carry is 1
F00C	05	SKIP	DCR B Decrease B register
F00D	C2, 07, F0		JNZ LOOP Jump to loop when Z flag is not 1
F010	21, 50, 80		LXI H,8050H Load Destination address
F013	71		MOV M, C Store C register content into memory
F014	23		INX H Increase HL Pair
F015	77		MOV M, A Store Acc content to memory
F016	76		HLT Terminate the program

Result 8050 93
8051 D0