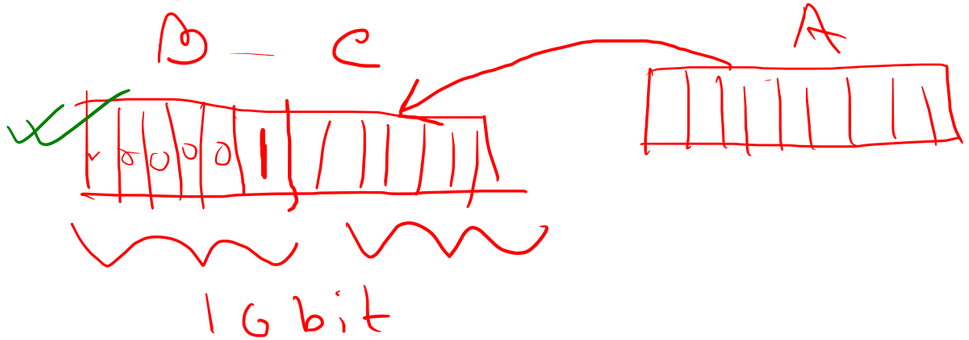
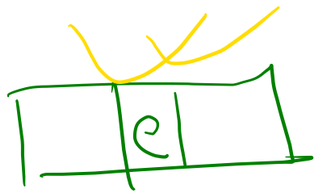
µP Programming

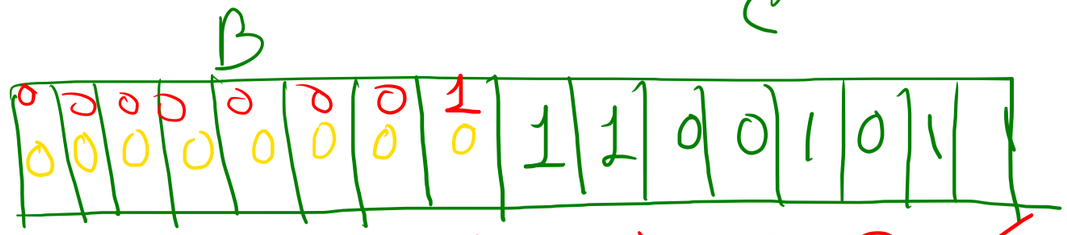
5) Add two 8bit numbers 48H & F5H and store it as 16 bit result.

Address	Mnemonics	Opcode	M·C	Comments
C000, C001	MVI	B, 00H		Moving the value 00H in the reg B
C002, C003	MVI	A, 48H		Moving the value 48H in the Acc
C004, C005	ADI	F5H		Add F5H with the content of the Acc



Address	Mnemonic	opcode	M-C	Contents
C006, C007 C008	JNC	Address C00AH		
C009	INR B			
C00A	MOV C, A			
C00B	STP			





16 bit count

6) Store AB H in memory location C100 H. Transfer the data to the reg B and then transfer to the memory location C200 H

Addrss	Mnemonics	Opcode	M.C	Comments
C000, C001 C002	LXI	H, C100	→	Loading HL pair with address C100
C003, C004,	MVI	M, ABH	→	Moving the data ABH to the memory location C100
C005	MOV	B, M	→	Moving the content of memory to reg B
C006, C007 C008	LXI	H, C200H	→	Loading the memory with address C200H
C009	MOV	M, B		
C00A	STP			

7) Perform logical AND (OR) of OFH and 02H and Store the result in C200H.

Address	Mnemonics	Operand	M.C	Comments
C000, C001	MVI	A, 0FH		Moving the value of 0FH into acc.
C002, C003	ANI (ORI)	02H		AND the of 02H with the content of the Acc.
C004, C005, C006	STA	C200H		Content of the Acc is stored in the memory location C200H
C007	STP			