ASSIGNMENT-6 EMU8086

1. addition

MOV AX, [1000h]

MOV BX, [1002h]

MOV CL, 00h

ADD AX,BX

MOV [1004h],AX

JNC jump

INC CL

jump:

MOV [1006h], CL

HLT

# emulate > view> memory>

Change to 1000 update

16 23 43 32 update

do only single step or run till hlt

In this 16 and 43 are lower value of ax and bx respectively and

23 and 32 arehigher bit

1. multiplication

MOV SI, 1100H

MOV AX,[SI]

MOV BX,[SI+2]

MUL BX

MOV [SI+4], AX

MOV [SI+6], DX

HLT

# IN this

Lower bit :- 1A

Higher but :- EF

Lower bit :- 50

Higher but :- CD

Memory address :- 1100 update

Then add 1A EF 50 CD > update

Run step by step result is C2 BF

3.Subtraction

MOV AX, [1000h]

MOV BX, [1002h]

MOV CL, 00h

SUB AX,BX

JNC jump

INC CL

NOT AX

ADD AX, 0001h

Jump:

MOV [1004h],AX

MOV [1006h], CL

HLT

* in updating memory always add loswer bit value first and then higher bit and

#in this

We subtract ax = 3243 bx= 2316 update

# emulate > view> memory>

Change to 1000 update

Write 43 32 16 23 update

Run till single step till hlt

And final ans is 0F2D