MIT Tutorial 3

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1. (SP): ~~27FDH~~ 27FFH
   (HL): 100 ~~6~~ $\Rightarrow$ ~~($03H$, FBH)~~

2.

0100H	Lxi	SP,	00FFH
0103H	Lxi	H,	0701
0106H	mvi	A,	20H.
0108H	sub	M	
0109H			

   i $(A) = 20$ H
   ii $(A) = 60$ H (96)

3.
```
   mvi A, 00H
loop: nop
   add B
   dcr C
   jnz loop
   hlt
```

```
4   lxi   SP, 4000H
    push    H
    mvi     H, 50H      ; flag data
    push    H
    pop     psw         ; data set
    pop     H           ; reset K
    hlt


5   lxi   C, 06     ; counter
    lxi   H, 205AH; last data
    lxi   D, 2050H ; destination

loop: nop
    mov A, M.
    stax    D
    inx     D
    dcx     H
    dcr     C
    jnz     loop

    hlt
```

6

		A	H	L	S	Z	CY	M
lxi	H, 2055 H	00	20	55	0	0	0	0
mvi	M, 8AH	00	20	55	0	0	0	8A
mvi	A, 76H	76	20	55	0	0	0	8A
add	M	00	20	55	0	1	1	8A
sta	2055H	00	20	55	0	1	1	0
hlt								

7a The program finds the maximum
of 3 numbers & stores it in
2100 H

bi (A) = 2BH
(B) = 2BH
(C) = 00H
(H) = 20H
(L) = 02H

ii CY = 1
Z = 0

iii (2000H) = 18H
(2001H) = 10H
(2002H) = 2BH
(2100 H) = 2BH

8

OD	O FFCH
2D	O FFDH
38	O FFEH
2F	O FFFH

C2

SP   1000H

$PC = 3001H$

$SP = 0FFEH$

$(B) = 20H$

$(C) = 0DH$

$(HL) = 2F38H$

$H = 2FH \quad \rightarrow M = 38H \qquad Z = 0$