

Lecture 12

Dhurgham Al-khaffaf Al-Asady

Q1/Write ALP to find the summation of even order contents of memory locations starting from 3000 to 3009H and save the result in 4000H.

Q2/Write ALP to find the smallest number of contents of memory locations starting from 3000 to 3009H and save the result in 4000H.

LXI H, 3000
MVI C, 00
MVI B, 0A
MOV A, M YY
ANI 01
JNZ XX
MOV A, C
ADD M
MOV C, A
INR L XX
DCR B
JNZ YY
MOV A, C
STA 4000
HLT

1 And 1=1(odd) & 0 And 1=0 (even)

```
LXI H, 3000
MVI B, 09
MOV A, M
INR L      XX
CMP M
JC        YY
MOV A, M
DCR B      YY
JNZ XX
STA 4000
HLT
```

Note: M Comp. M+1=

- 1) IF M>M+1 CY=0
- 2) IF M<M+1 CY=1