

TP01: Right shift 4 bits of 8-bits data

LDA 2000

CMC

RAR

RAR

RAR

RAR

STA 2001

HLT

TP02: Right shift 8 bits of 16-bits data

LHLD 2000

XCHG

MOV L, D

MOV H, E

SHLD 2002

HLT

TP03: Left shift 4 bits of 8-bits data

LDA 2000

RLC

RLC

RLC

RLC

STA 2001

HLT

TP04: Left shift 8 bits of 16-bits data

LHLD 2000

XCHG

MOV L, D

MOV H, E

SHLD 2002

HLT

TP06: Calculate the sums of series of 8 bits numbers (no carry)

LXI H 2010

MOV B, M

MVI A 00

LXI H 2000

LOOP: ADD M

INX H

DCR B

JNZ LOOP

STA 2005

HLT

TP07: Calculate the sums of series of 8 bits numbers (with carry)

LXI H 2010

MOV B, M

MVI A 00

MVI C 00

LXI H 2000

LOOP: ADD M

JNC SKIP

INR C

SKIP: INX H

DCR B

JNZ LOOP

STA 2005

MOV A C

STA 2006

HLT

TP08: Calculate the sum of  $1+2+3+\dots+n$

LDA 2000

MOV B,A

MVI A 00

LOOP: ADD B

DCR B

JNZ LOOP

STA 2001

HLT