

Homework 1 Week 2,

1. Add three 8-bit numbers

LHLD 4000

LDA 4002

ADD L

ADD H

MOV L, A

MVI A, 00

ADC A

MOV H, A

SHLD 4005

HLT

2. Add two 8-bit numbers and subtract one 8 bit number

MVI A, 00

LHLD 4000

LDA 4002

MOV B, A

MVI A, 00

ADD H

ADD L

MOV E, A

MVI A,00

ADC A

MOV H, A

MOV A,E

SUB B
MOV L, A
SHLD 4005
HLT

3. Add three 16-bit numbers

LHLD 4000
XCHG
MOV B,D
MOV C,E
LHLD 4002
XCHG
LHLD 4004

ADD L
ADD E
ADD C
MOV L, A

MVI A 00

ADD B
ADD D
ADD H
MOV H, A

SHLD 4008
HLT

4. Add two 16- bit numbers and subtract 16-bit number

MVI A, 00
LHLD 4000
XCHG
MOV B,D
MOV C,E

LHLD 4002

XCHG

LHLD 4004

ADD C

ADD E

SUB L

MOV L, A

MVI A, 00

ADD B

ADD D

SUB H

MOV H, A

SHLD 4008

HLT