

EMPS 10

3-13-08



• FINAL WEDS 3-19 8-11 am HERE

- Bring UESC Picture ID
- Come a little early

• TODAY

- Quizzes
- EVALS
- HW & DUE

Ex. Get 3 inputs a, b, c from user,
then print $a+b-c$.

Pseudo-code:
1.) get a, b, c
2.) $d \leftarrow a+b-c$
3.) print d
4.) stop

Assembly Lang:

• BEGIN

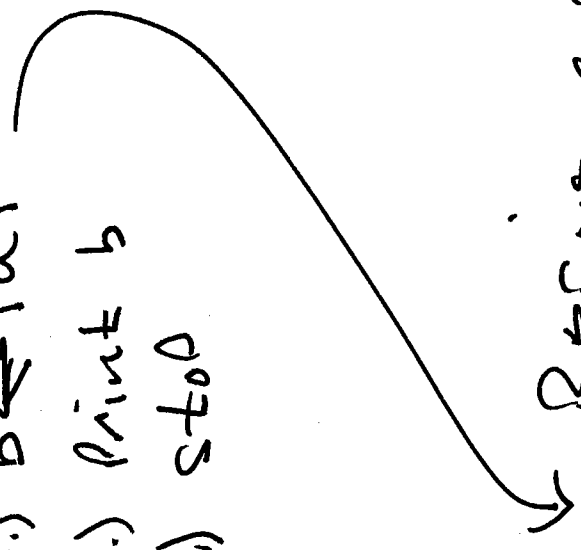
IN	A	1101	?
IN	B	1101	?
IN	C	1101	?
LOAD	A	0000	?
ADD	B		
SUBTRACT	C		

STORE D
OUT D
HALT
A: DATA 0
B: DATA 0
C: DATA 0
D: DATA 0
END

3

EX. FIND ABS. VALUE OF A #

- 1.) get a
- 2.) $b \leftarrow |a|$
- 3.) print b
- 4.) stop



REFINEMENT

- 2.1) if $a < 0$
- 2.2) $b \leftarrow 0 - a$
- 2.3) else
- 2.4) $b \leftarrow a$

• BEGIN

IN

A

LOAD

ZERO

COMPARE

A

JUMPLT

NEGATIVE

LOAD

A

STORE

B

JUMP

PRINT

NEGATIVE:

SUBTRACT

A

STORE

B

PRINT:

OUT

B

HALT

A:

• DATA

0

B:

• DATA

0

ZERO:

• DATA

0

• END