

Computer Architecture

Week#10

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Task1: Accept three numbers as input and subtract them.

START:

INP

STA NUM

INP

CMA

INC

ADD NUM

STA NUM

INP

CMA

INC

ADD NUM

OUT

HALT

NUM: .data 1 0

EXECUTING...

Enter Inputs, the first of which must be an Integer: 10

Enter Inputs, the first of which must be an Integer: 5

Enter Inputs, the first of which must be an Integer: 2

Output: 3

EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

Task2: Subtract two numbers stored in memory.

START:

ADD NUM1

STA NUM1

CMA

INC

ADD NUM2

OUT

HALT

NUM1: .data 1 3

NUM2: .data 1 5

EXECUTING...

Output: 2

EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

Task3: Store the result of subtraction in a memory location.

START:

INP

STA NUM

INP

CMA

INC

ADD NUM

STA RESULT

OUT

HALT

NUM: .data 1 0

RESULT: .data 1 0

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 3
Enter Inputs, the first of which must be an Integer: 2
Output: 1
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```