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Lab submission:10

Class Work:

The screenshot displays a MIPS assembly simulator interface with four main panels:

- Registers:** A table showing the state of MIPS registers.
- Assembly Code:** A list of instructions for a program named "multiply.a".
- Memory:** A table showing the contents of memory addresses.
- Execution Status:** A text area showing the current state of the simulation.

Name	Width	Data
AC	16	FFF6
AR	12	001
DR	16	0005
E	1	0
I	1	0
IR	16	E001
PC	12	006
S	1	1

```
1 START:
2 INP
3 STA NUM
4 INP
5 MULTIPLY NUM
6 OUT
7 HLT
8
9 NUM: .data 1 0
10
11
12
```

Addr	Data
000	F800
001	6006
002	F800
003	1006
004	F400
005	E001
006	0005
007	0000
008	0000
009	0000
00A	0000
00B	0000
00C	0000
00D	0000
00E	0000
00F	0000
010	0000

EXECUTING...
Enter Inputs, the first of which must be an Integer: 5
Enter Inputs, the first of which must be an Integer: -2
Output: -10
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

Task 1:

The screenshot displays a computer architecture simulator interface with three main panels: Registers, Assembly Code, and Memory.

Registers Panel: A table showing the state of various registers.

Name	Width	Data
AC	16	0006
AR	12	001
DR	16	0000
E	1	0
I	1	0
IR	16	E001
PC	12	005
S	1	1

Assembly Code Panel: Displays a list of instructions under the label 'mula X'.

```
1 START:
2 INP
3 STA NUM
4 LDA NUM
5 OUT
6 HLT
7 NUM: .data 1 0
```

Memory Panel: A table showing memory addresses and their corresponding data values.

Addr	Data
000	F800
001	E005
002	3005
003	F400
004	E001
005	0006
006	0000
007	0000
008	0000
009	0000
00A	0000
00B	0000
00C	0000
00D	0000
00E	0000
00F	0000
010	0000

Execution Log: Located at the bottom of the window, it shows the following text:

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 6
Output: 6
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```