Computer Architecture

Name: Wajahat Ali Khan   **Sap I'd:** 55431

Section: BSCS 4-1   **Instructor:** Tabbasum Javed

Lab Task: 06

Question-1

Take an input from the user and store it in memory using the STA instruction.

Solution

START:

INP

STA NUM

HLT

NUM: .data 1 0

Question-2

Retrieve the stored value from memory using the LDA instruction.

Solution

START:

INP

STA NUM

LDA NUM

HLT

NUM: .data 1 0

Question-3

Display the loaded value as output.

Solution

START:

INP

STA NUM

LDA NUM

OUT

HLT

NUM: .data 1 0

Out Put

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