

## Computer Architecture

**LAB 13** 

Fasiha Tariq-53289

BS-CS 4

Submitted to:

Ma'am Ayesha Ikram

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Task 1:

**START:** 

**INP** 

**JEZ DONE** 

**ADD SUM** 

**STA SUM** 

**JUMP START** 

DONE:

LDA SUM

**OUT** 

**HLT** 

SUM: .data 20

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 2
Enter Inputs, the first of which must be an Integer: 3
Enter Inputs, the first of which must be an Integer: 4
Enter Inputs, the first of which must be an Integer: 5
Enter Inputs, the first of which must be an Integer: 0
Output: 14
EXECUTION HALTED DUE TO AN EXCEPTION: The step is out of range at step 0 of JNE.
```

Task 2:

START:

**INP** 

**JMPP DONE** 

**ADD SUM** 

**STA SUM** 

JUMP START

DONE:

LDA SUM

**OUT** 

**HLT** 

SUM: .data 20

```
EXECUTING...

Enter Inputs, the first of which must be an Integer: -3

Enter Inputs, the first of which must be an Integer: -9

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

Enter Inputs, the first of which must be an Integer: -7

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

Output: -24

EXECUTION HALTED DUE TO AN EXCEPTION: No opcode matched the bits in the register: IR.
```