

## "Computer Architecture"

"Lab#9"

Name: Urba Naseem

**Sap-Id:** 52920

**Department:** BS-CS 4

Submitted to: Ma'am Ayesha Akram

**Date:** 16<sup>th</sup> April ,2025

### **Task 1:**

START:

INP

STA NUM

**INP** 

OR NUM

OUT

HLT

NUM: .data 1 0

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 0
Enter Inputs, the first of which must be an Integer: 1
Output: 1
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```

#### Task 2:

START:

**INP** 

STA NUM

**INP** 

AND NUM

NOT NUM

OUT

HLT

NUM:.data 1 0

```
EXECUTING...
```

Enter Inputs, the first of which must be an Integer: 1
Enter Inputs, the first of which must be an Integer: 0
Output: -1
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

### Task 3: START: **INP** STA NUM **INP** OR NUM NOT NUM OUT HLT NUM:.data 1 0 EXECUTING... Enter Inputs, the first of which must be an Integer: 1 Enter Inputs, the first of which must be an Integer: 0 Output: -2 EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

#### **Task 4:**

START:

**INP** 

STA NUM

INP

**XOR NUM** 

OUT

HLT

NUM: .data 1 0

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 1
Enter Inputs, the first of which must be an Integer: 0
Output: 1
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```

# **Task 5:** START: **INP** STA NUM NOT NUM OUT HLT NUM: .data 1 0 EXECUTING... Enter Inputs, the first of which must be an Integer: 1 Output: -2 EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]