

## **Lab 2: Memory Block Copy with Verification & Interrupt-Based LED Blinking**

Using the 8085 simulator, complete the following labs.

### **a. Memory Block Copy with Verification**

#### ***Objective:***

Write an 8085 program to:

- 1. Copy 10 bytes of data from one memory block to another.*
- 2. After copying, verify that each byte in the destination exactly matches the source.*
- 3. If all bytes match, store **FFH** at address **C070**; otherwise, store **00H**.*

#### ***Deliverables:***

1. Assembly code to simulate this lab.
2. Explain the program flow and logic.
3. Describe a different logic of completing the same lab.

### **b. Interrupt-Based LED Blinking (Simulated I/O)**

#### ***Objective:***

1. Simulate blinking an LED using a software interrupt (e.g., RST 7.5).
2. The "LED" is represented by toggling a bit in a memory-mapped I/O location.

#### ***Deliverables:***

1. Assembly code to simulate this lab.
1. Describe the logic.
2. Outline any assumptions made in the lab.