**Lab 1: Introductory Lab to Microprocessors – Intel 8085 *Objective:***

1. *Arithmetic Operations – Addition and Subtraction*
2. *Finding the largest Number*
3. *Bonus Task: Multiplication and Division*

**Tools:**

Sim8085 – Can use installed version or online version ([https://www.sim8085.com/)](https://www.sim8085.com/)

# a. Arithmetic Operations – Addition and Subtraction

Write an assembly code for 8085 microprocessor to add and subtract two 8-bits numbers. Thereafter, store to results in memory.

Deliverables:

* Simple diagram of 8085 microprocessor showing movement of data/instruction during the operations.
* Codes of the operations o Your code MUST use some general purpose registers.

A screenshot of a computer program

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# b. Finding the Largest Number

Write an assembly language program for 8085 microprocessor to compare two numbers and store the larger number in memory.

Deliverables:

* Simple diagram of 8085 microprocessor showing movement of data/instruction during the operations.
* Codes of the operations

A screenshot of a computer

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# Bonus Task: Multiplication and Division

Describe how multiplication and division is done in an 8085 microprocessor.

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