Lab 1: Introductory Lab to Microprocessors – Intel 8085

Objective:

    a) *Arithmetic Operations – Addition and Subtraction*
    b) *Finding the largest Number*
    c) *Bonus Task: Multiplication and Division*

Tools:

Sim8085 – Can use installed version or online version (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
  - Your code MUST use some general purpose registers.

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

c. Bonus Task: Multiplication and Division

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