### THE MICROPROCESSORS & MICROCONTROLLERS

**Instructor: The Tung Than** 

#### PRACTICE EXERCISE #5:

#### ADDITION OF TWO 32-BIT NUMBERS ON THE 8086 PROCESSOR

# I. Student preparation

- Students install the emu8086 software

#### **II.** Practice content

- 1. Refer to the example:
  - Students open File >> example >> add/subtract
  - Run test, based on the instruction set describing its operation.
    (Help >> Documentations and tutorials or Press F1)
  - o Know how to reuse their screen print code
- 2. Write a program that adds 2 32-bit numbers.

#### III. Exercise

Write a program to subtract 2 32-bit numbers.

### IV. Report

# Compress design files and report files into a file named as follows:

### [<LAB...>]-[<Student code>]-Full name

The required report file contains the following contents:

- 1. Describe how sample code works
- 2. Flowchart of the program algorithm to add two 32-bit numbers.
- 3. Explain how the algorithm works, accompanied by a video (send a Google Drive link) to demonstrate the circuit operation in case the instructor cannot run the design file.