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:
     o   Students open File >> example >> add/subtract
     o   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.