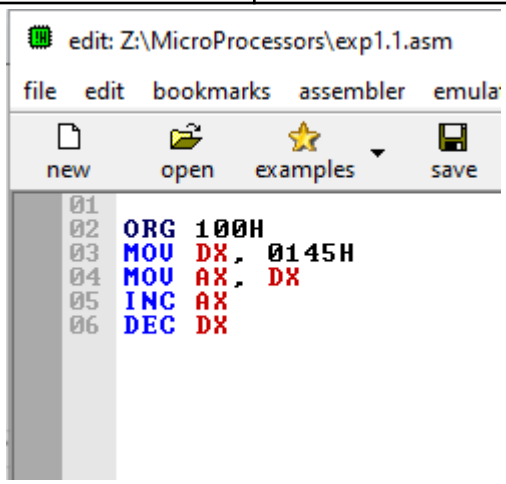
Laboratory Report

Laboratory Exercise No.:	1	**Date Performed:**	Sept 1 2025
Laboratory Exercise Title:	Using the EMU8086 Integrated Development Environment		
Name of Student:	Cyril John Christian A. Calo	**Document Version:**	1

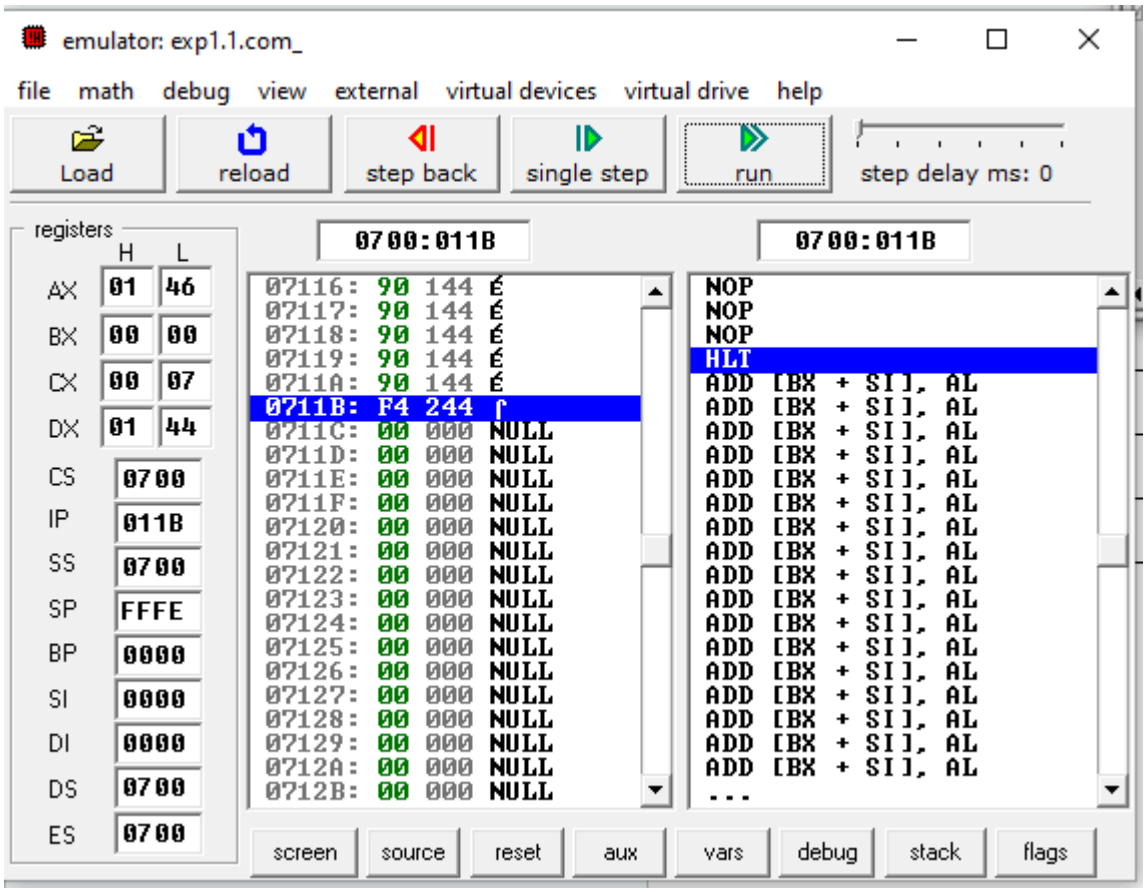
Activity #1

<Write the calculations and solutions performed in Activity #1. Include sources codes and schematic diagrams if required in the exercise.>

Instruction	Register value after the instruction is executed
MOV DX, 0145H	DX = 0145H
MOV AX, DX	AX = 0145H
INC AX	AX = 0146H
DEC DX	DX = 0144H



Code for EXP 1



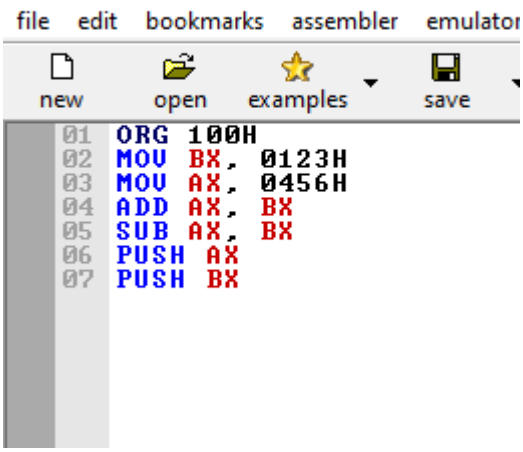
Final Output for EXP 1

Activity #2.1

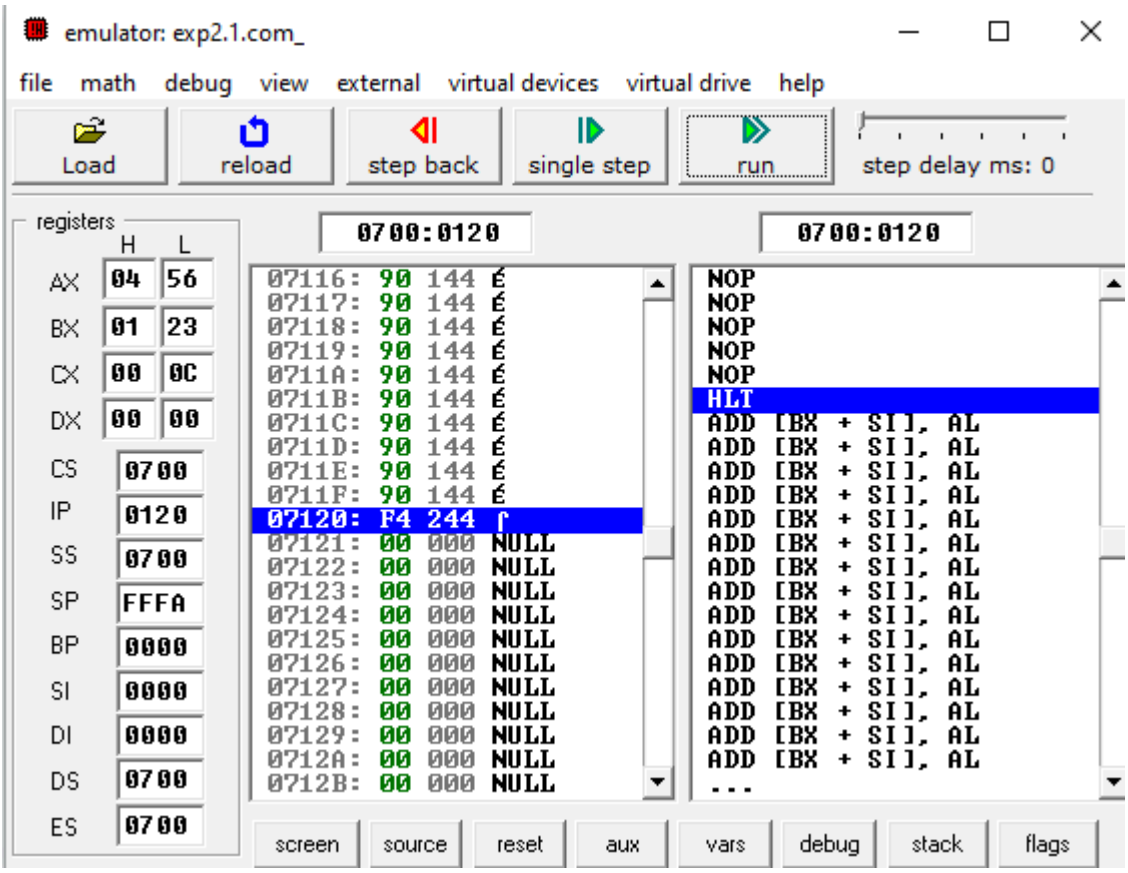
<Write the calculations and solutions performed in Activity #2. Include sources codes and schematic diagrams if required in the exercise.>

Instruction	**Register value after the instruction is executed**
MOV BX, 0123H	BX = 0123H
MOV AX, 0456H	AX = 0456H
ADD AX, BX	AX = 0579H
SUB AX, BX	AX = 0456H
PUSH AX	NO CHANGE IN REGISTERS SP = FFFCH

PUSH BX	NO CHANGE IN REGISTERS SP = FFFAH



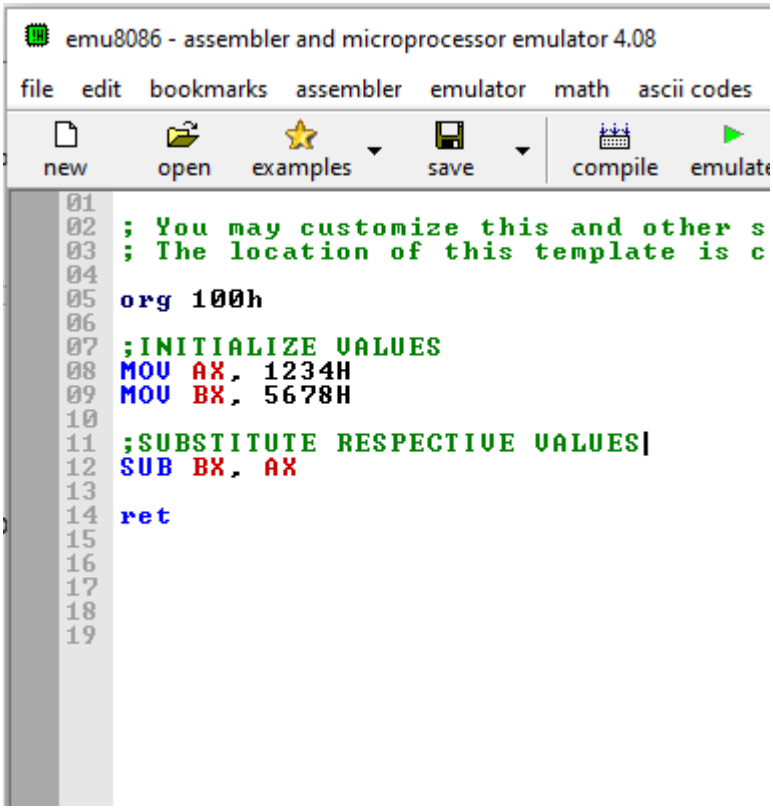
Code for EXP 2.1



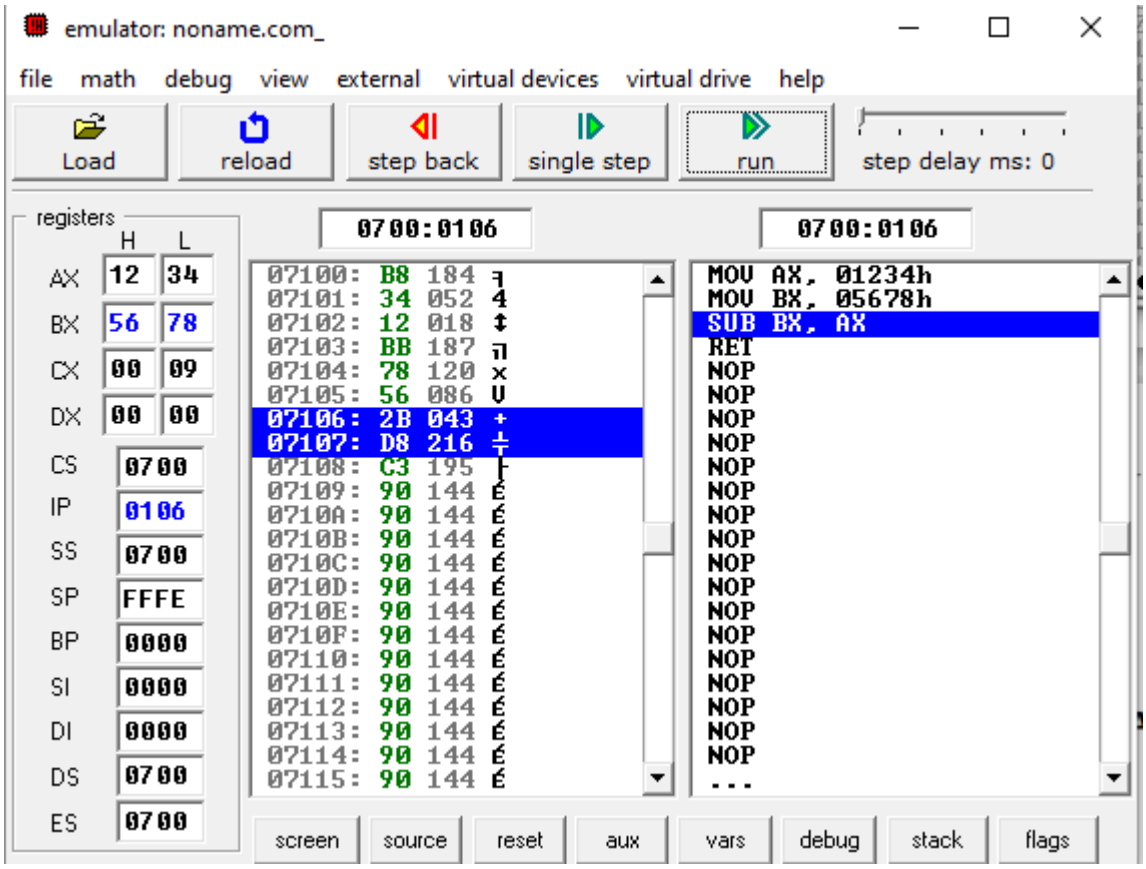
Final output after execution

Activity #2.2

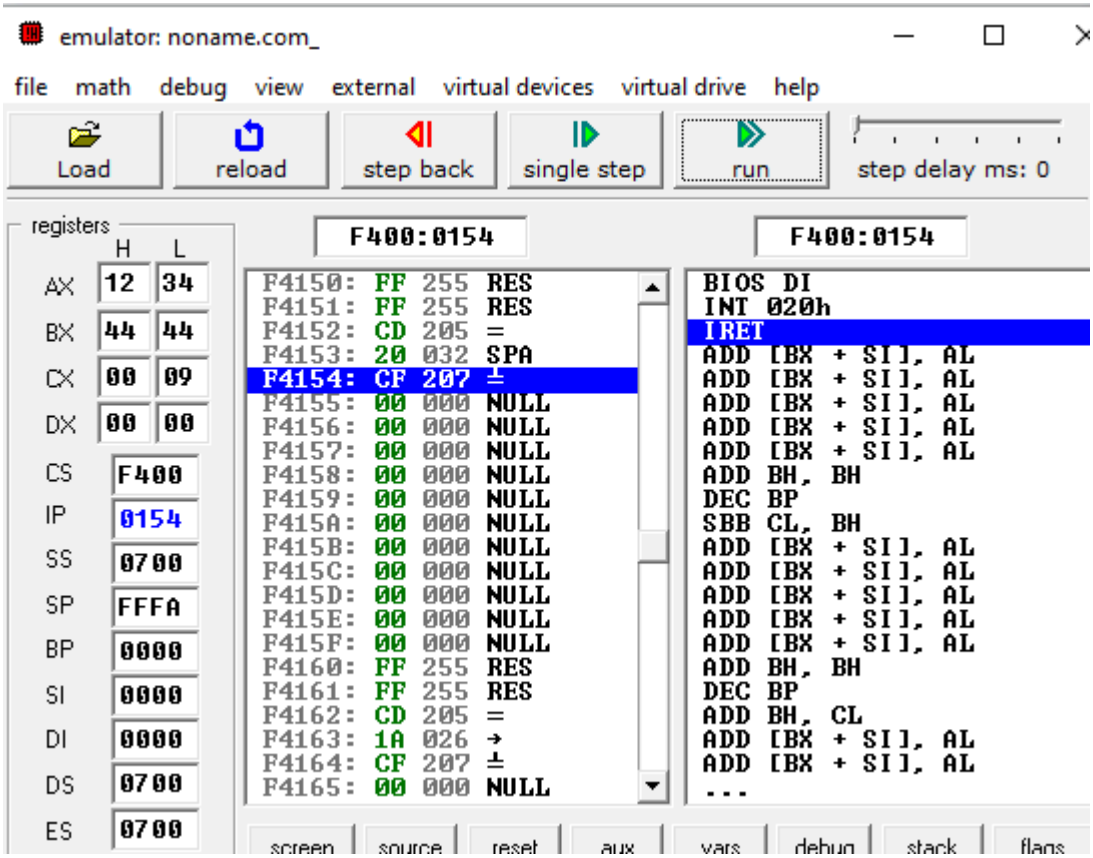
<Write the calculations and solutions performed in Activity #2.1 Include sources codes and schematic diagrams if required in the exercise.>



Code for Register Substitution



Initial values of register AX and BX



Respective AX and BX values after executing substitution operation

References

<Write the references you have used if any. References can be a textbook, web article (as long as reliable) and journals.>