Course Name:	**Microprocessors and Peripherals (2UXC404)**	**Semester:**	**IV**
Date of Performance:	3/3/2021	**Batch No:**	B2
Faculty Name:	KCS	**Roll No:**	1912052
Faculty Sign & Date:		**Grade/Marks :**	___/25

Experiment No: 4

Title: Generation of Fibonacci series

Aim and Objective of the Experiment:

Aim: Write an 8086 based ALP to

1. Find first 20 fibonacci series numbers and store them in the data segment.

Objectives:

To study basic instructions and addressing modes of 8086. Understand assembler directives and concept of data and code segment

This experiment covers following instructions groups.

a) Data transfer
b) Arithmetic (Multiply instructions)
c) Branch instructions

COs to be achieved:

CO 2. Develop 8086 based assembly language programs for various applications.

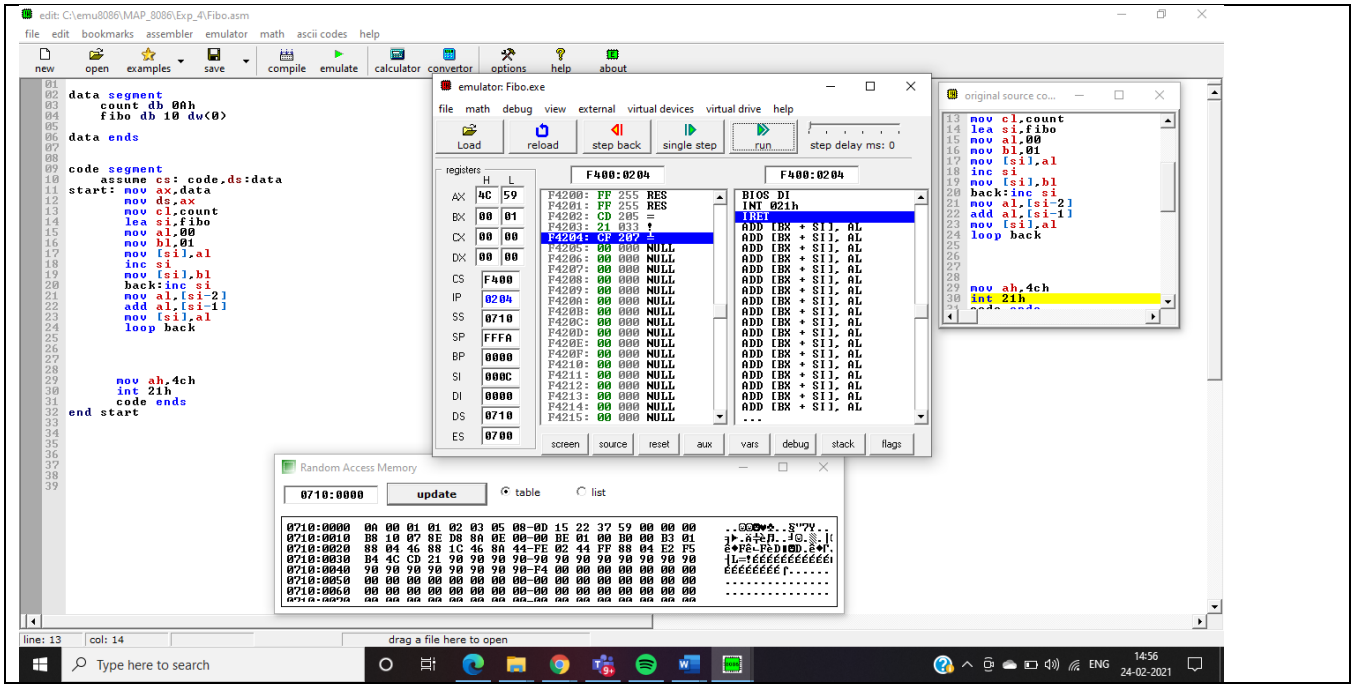
Useful links

NASM Assembler
https://www.tutorialspoint.com/compile_assembly_online.php

TASM

Work to be done

1. Upload image of handwritten algorithm/flowchart and lst file of the program and output screenshots . Also upload results for post lab questions.



Post Lab Subjective/Objective type Questions:

Q.1 Which of the following combination of segment register and offset is not calculating address 23410H

a. DS : 2000 H and SI : 3410 H
b. DS : 2300 H and SI : 0410 H
c. DS: 2341 H and SI : 0010 H
d. DS : 2241 H and SI : 1000 H

ANS: c. DS: 2341 H and SI : 0010 H

Q.2 What addresses will be generated in following instruction execution?
If DS = 3200H , SI = 12C3H, DI = 1200H, ES = 2190H

MOVSB

For Source-33C23
For Destination-22100H

Q.3 What is LOOP instruction ? explain use of CX register in the same.

The **LOOP instruction** assumes that the CX register contains the **loop** count. When the **loop instruction** is executed, the CX register is decremented and the control jumps to the target label, until the CX register value, i.e., the counter reaches the value zero.
Conclusion: We implemented Fibonacci series using 8086 assembly language programming on emulator 8086

Signature of faculty in-charge with Date: