ASSIGNMENT-III

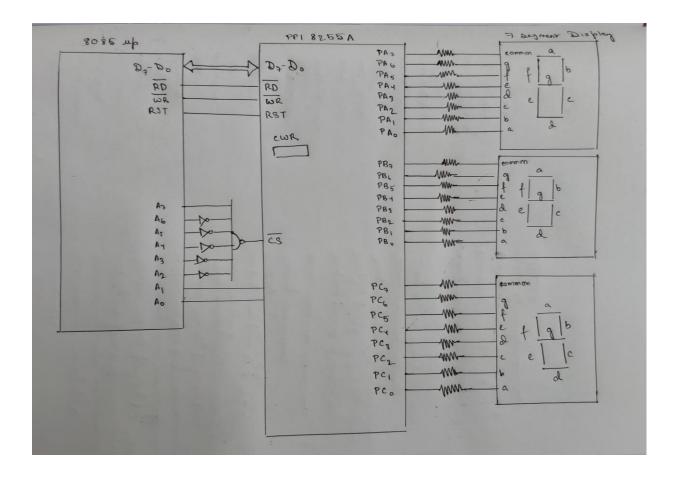
NAME: SOUMYADIP GHOSH

STREAM: CSE-A

ROLL NUMBER: 1951007

SUBJECT: MICROPROCESSORS LAB

Circuit Diagram:



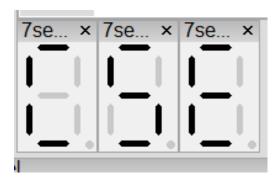
Question 1a:

Write an ALP of 8085 to glow CSE/ HIT (HIT) in Three Seven Segment Displays, connected through 8-bit Latches individually.

Code:

```
ORG 2000H
        LXI H,2500H
L1:
        MOV A, M
         OUT 80H
         INX H
        MOV A, M
         OUT 81H
         INX H
        MOV A, M
         OUT 82H
         JMP L1
         HLT
         ORG 2500H
         DB 39H, 6DH, 79H
         END
```

Output:



2) Write en ALP of 8085 to gins CSE in 3 seven Segment displays. connected through 8-bit latches COMMENTSAGMANA MNEMONICS A per offi was Brown Loads contents 2500 H into 11: TXI H 5200H 14L origister pein Moves contents of memory pointed by HL pair to accumulator MON AIM Drsplaying result in pont A of 7 symant display Too Increases HLong pen by INX 13 Moves munony content to say A MOV AIM Duplaying would in pont B of Quenope Delay HIB TUO Incresso HL reg per by 1011 INX M Moves memory content to sug. A MOU AIM mes at wand from Displaying result in poot Capit OUT 82 Hardonage Vrandymos 7 syment display Jumps to label L1 1-10ths program to termination

HLT

Question 1b: Write an ALP of 8085 to blink the above glow. Code: ORG 2000H LXI SP,3FFFH MVI A,80H OUT 83H L1: LXI H,2500H MOV A,M OUT 80H INX H MOV A,M OUT 81H INX H MOV A,M OUT 82H ;subroutine DELAY CALL 2600H MVIA,00HOUT 80H OUT 81H OUT 82H **CALL 2600H** ;subroutine DELAY calling JMP L1 ORG 2600H MVI C,10H L2: DCR C JNZ L2 **RET** ORG 2500H DB 39H,6DH,79H

END

17 by Write on ALP of 8085 to black the above glow

. MNEMONICS

L1: LXI H , 2500 H

MOV AIM

PIO8 TUO

A XNE

MIA VOIM

OUT 811H

INX H

MIAVOM

OUT 8217

CALL 2600H

MVI A,0017

H08 TUO

DI 18 JUO

OUT 82 14

CALL 2600H

JMPLI

ORG 2600H

DO1 MVIC, 1017

12: DeR C

JNZ LZ

RET

COMMENTS

Toog 5200H was HT and bein

More memony contents into accumulation

Display into pont A of 7 bir symnr

Increments HL ry boin by 1

More memory contents into occumulator

Bishley into port B of 7 bit segment

Increments HL neg pein by !

Move memony contents into

accumulation

Display into pont cd 7 bit

display somet

Delay subrowtine

Move Oolt into accomulation

Display pont A of display segment

Display ponto of display segment

Display porte of display segment

Delay subrowhne colling

Jump to LI lobel

Moving 1018 to C

Decrementy value of c by 1

Rumping back to L2 terlabel

Return to delay subnowtine

call end.