**Name:** Vineel Sai

**Reg No:** 498

**IIIT Kalyani, Assignment 4 8085 Micro controller**

**PROB.1** FIND THE LARGEST NO. FROM A SERIES OF NUMBERS. THE NO. OF DATA IS STORED IN 9500H AND THE DATA IS STORED FROM 9501H. STORE THE RESULT IN 9550H.

4200 21 00 095 LXI H, 9500H

4203 4E MOV C, M

4204 23 INX H

4205 46 MOV B, M

4206 0D DCR C

4207 23 LOOP: INX H

4208 7E MOV A, M

4209 B8 CMP B

420A DA 0E 042 JC MOVE

420D 47 MOV B, A

420E 0D MOVE: DCR C

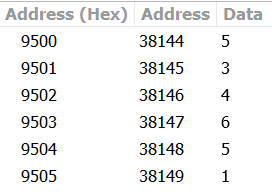
420F C2 07 042 JNZ LOOP

4212 21 50 95 LXI H, 9550H

4215 70 MOV M, B

4216 76 HLT

**INPUT OUTPUT**

**PROB.2** FIND THE SMALLEST NO. FROM A SERIES OF NUMBERS. THE NO. OF DATA IS STORED IN 9500H AND THE DATA IS STORED FROM 9501H. STORE THE RESULT IN 9550H.

4200 21 00 095 LXI H, 9500H

4203 4E MOV C, M

4204 23 INX H

4205 46 MOV B, M

4206 0D DCR C

4207 23 LOOP: INX H

4208 7E MOV A, M

4209 B8 CMP B

420A D2 0E 042 JNC MOVE

420D 47 MOV B, A

420E 0D MOVE: DCR C

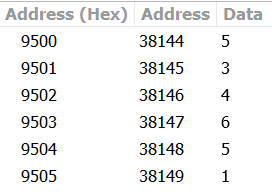
420F C2 07 042 JNZ LOOP

4212 21 50 95 LXI H, 9550H

4215 70 MOV M, B

4216 76 HLT

**INPUT OUTPUT**

**PROB.3** TWO 8 BIT NUMBERS ARE STORED IN MEMORY LOCATIONS 8C00H AND 8C01H. PERFORM DIVISION AND STORE THE RESULT IN 8C02H.

4200 21 00 08C LXI H, 8C00H

4203 7E MOV A, M

4204 23 INX H

4205 4E MOV C, M

4206 06 00 MVI B, 00

4208 04 LOOP: INR B

4209 91 SUB C

420A D2 08 042 JNC LOOP

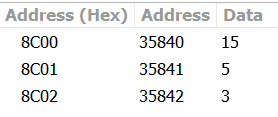
420D 05 DCR B

420E 78 MOV A, B

420F 32 02 08C STA 8C02H

4212 76 HLT

**OUTPUT**

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**PROB.4** TWO 8 BIT NUMBERS ARE STORED IN MEMORY LOCATIONS 8C00H AND 8C01H. PERFORM DIVISION AND STORE THE QUOTIENT IN 8C02H AND REMAINDER IN 8C03H.

4200 21 00 08C LXI H, 8C00H

4203 46 MOV B, M

4204 0E 00 MVI C, 00

4206 23 INX H

4207 7E MOV A, M

4208 B8 LOOP: CMP B

4209 DA 11 42 JC SKIP

420C 90 SUB B

420D 0C INR C

420E C3 08 042 JMP LOOP

4211 32 02 08C SKIP: STA 8c02H

4214 79 MOV A, C

4215 32 03 08C STA 8C03H

4218 76 HLT