

Write a program to find minimum of n numbers stored at consecutive memory locations starting from 3050H and store that at following address.

Memory Address	Assembly code	Hex Code	Comments
0000	LXI H,3050H	21 50 30	Point to get count of numbers.
0003	MOV C,M	4E	Moves count to c
0004	INX H	23	Increase value of H
0005	MOV B,M	46	Move value in memory to B
0006	DCR C	0D	Decrease value of C by one
0007	LOOP: INX H	23	Increase value of H by 1
0008	MOV A,M	7E	Move value in memory to Acc
0009	CMP B	B8	Compare value in B with that in A
000A	JNC SKIP	D2 0E 00	Jump to label skip if B<=A
000D	MOV B,A	47	Move value in Acc to B
000E	SKIP: DCR C	0D	Decrease value of C
000F	JNZ LOOP	C2 07 00	Jumps to label LOOP if value in C is not 0
0012	INX H	23	Increase value of H
0013	MOV M,B	70	Move value in B to memory
0014	HLT	76	Stop the program.

Procedure:

Step – 1: Writing program in memory.

1. Press Reset
2. Press SET/MEM
3. Type in Address 0000
4. Press Enter
5. Type 1st Hex Code (Here 21)
6. Press Enter
7. Follow step 5 and 6 to type in all Hex Code

Step – 2: Assigning Value to the Address Location

1. Press Reset
2. Press SET/MEM
3. Type in Address of 1st Location (Here 2050)
4. Press Enter
5. Enter value of N (total count of number)
6. Press Enter
7. Enter a Number

8. Press Enter
 9. Repeat Step 7 and 8 N-1 times

Step – 3: Executing the program

1. Press Reset to clear Buffer
 2. Press Go
 3. Enter Starting Address of Program (Here 0000)
 4. Press Execute

Step – 4: Checking output

1. Press reset and Clear the Buffer
 2. Press Go
 3. Enter Result Location (Here 2050+ value of N+1)
 4. You will find the minimum of N digits

Output:





