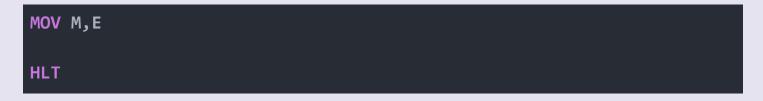
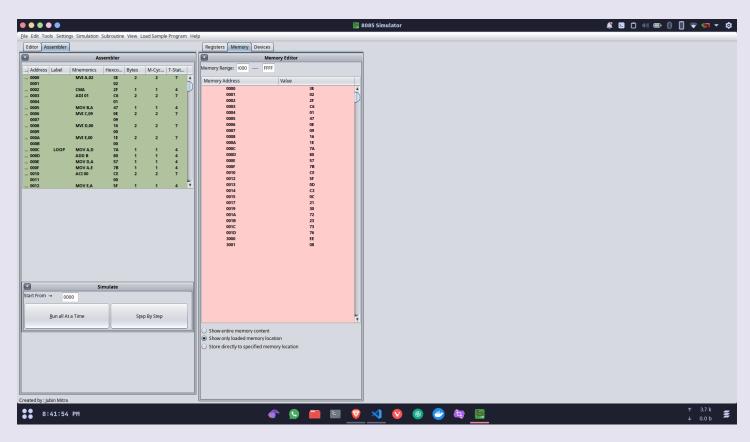
Aim: Exercise for jump instruction.

Exercise:

1. Multiply 2's complement of 02H with 09H and store result into 3000H (LSB) and 3001H (MSB).

```
MVI A,02H
CMA
ADI 01H
MOV B,A
MVI C,09H
MVI D,00H
MVI E,00H
LOOP:
MOV A,D
ADD B
MOV D,A
MOV A, E
ACI 00H
MOV E,A
DCR C
JNZ LOOP
LXI H,3000H
MOV M,D
INX H
```



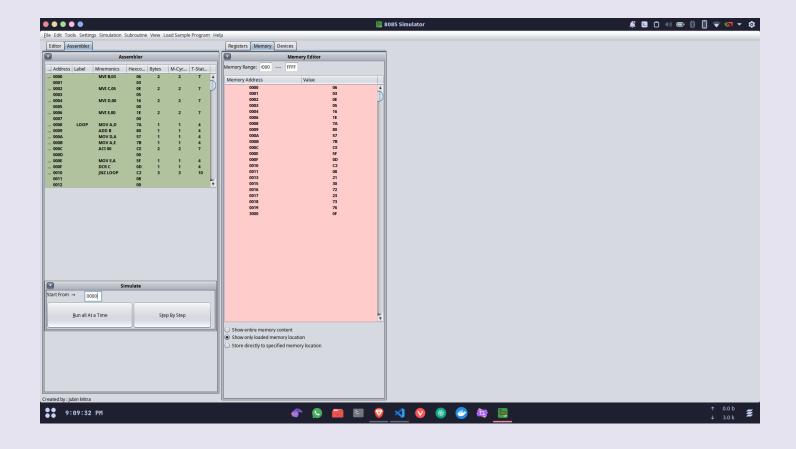


	PAGE NO.
4	40 3) 3.2 2 3 4
*	the state of the s
Name	Yash Lakhtariya
	21162101012
	CBA Batch-51
- subject	M&A Practical S
1	a color of the state of the sta
75	
Code	MUI AOZH // load OZH MA A
- 14	CMA // or I's complement of A.
0.1	ADJ 014 11 2's complement of 02 in A
7	MOV B, A / store A's contents in B
	MUICOGH 11 load DAH in C
<u> </u>	MUI D'OOH // clar D. (For [MSB)
	MUIF, DOH // clear F (For MSB)
	£, (
44 //	L00P: 900
	MOVA, P // load from P to A
	ADD B Madd B to A
	mov P, A 11 update: D (158)
8.0	MON A, E // copy from E to A
51047	MOVEA // replate E CMS B
	DCR C (decrement counter
in the	JNZ LOSP ! / Supert till counter is zen
* *)	JNZ (00) TO SEEP EAT THE COUNTY IS AND
	LX1 4,3000H // load . Sooot in HL Pain
	MOV M. P. 11 store LSB in Al pointer
1.25	INX H / increment. He
	MOV M. F // store MSB in H2 pointer
	HLT // end execution

	SWEET STATES			PAGE NO.)
Address	Label Mnemonics	Her	Bytes	Mrcycles	T-states
0000	MV1 A 62	3 F	2	1 2	7
1000	0.40	02	under settle	inna	The state of the s
0.002	CMA: ARCH	2/	13	1. 6.	4
0003	AP1 21			7.7/*,	7
0004		_C6_		5. 111	
0003	MOVEA	47		***	4
0006	MVI COR	DE	~ · ·	V OV	
4000	the sold and the	09	200	4417 2	7
8000	TOO SIVM	16	7)	V6M) 2	7
0009	ा है। के जिल्ला	00	34	· volta /	- 7
AGOG	12 MV 200 15.	HE	51 101	1 1/10/1	
000 8	- Meneral C	00	1. 40-	with C	7
000 C	LOOP. MON AD	FA	5 1 12		,
0000	APD B	80	1	· · · · · · · · ·	5
5000	MOV'D A	\$3	12.00(5)		- 7
1.000F	12 (201) Q MOVAE	78	The state of the s	V.Ch.	
0010	A 1AC1 00	CE	7	V	
10011	11 of (82M) 17 Mas	00		A (- C	<u> </u>
0012	MOV E, A	3F		1	
0013	OCR Cho	0.0	.1	TJA	4
0019	JNZ 100P	C2	3	3	10
0015	•	00		1 10 10	
2,000	• •	00	ile i i		
8017	LX1 4,3000	21	3	3	10
0518		00			
0019		30	37		
A100	MOVMO	72		2	录
810-ए	1NX H	23		(6
०गट	MOV M, F	73		2	7
0010	MIT	76	1	2	

2. Multiply 03H with 05H and store result into 3000H (LSB) and 3001H (MSB)

```
MVI B,03H
MVI C,05H
MVI D,00H
MVI E,00H
LOOP:
MOV A,D
ADD B
MOV D,A
MOV A, E
ACI 00H
MOV E,A
DCR C
JNZ LOOP
LXI H,3000H
MOV M,D
INX H
MOV M,E
HLT
```



2 had	TOTAL STREET,		
	180 Y 24 25 10	PAGE NO	
		DATE	
- J	ALUL A DELL	11 10 and 034 in B	The state of the s
2500	MUL BOSH	Il load OSH in C	
	MUIC, 05H	11 clear D (to store	1:00)
	WI EDDH	11 clear E C to store	
nest*	MUL E OOH	/1 dea 10 5100	The Const
	Loop:		
•	MOV A:D	11 copy from P to A	
	A00 B	11. add B	
	MOU P.A	11 update D. (LSB)	1. A. A. A. A.
7	MOV A.E	il load MSB (F) to	A
	ACT DOH	Il am crement it ca	
	MOV EA	11 repolate E CMSE	
70	PCRC	Il decropent compler	
4	TH2 LOOP	11 separt till counts	
	<u> </u>	g con	140-
	LX1 4,3000H	11 load 300014 in H	L pair
· · · · · · · · · · · · · · · · ·	MOV M. D	11 copy from Dass) +	
- (A)	'H XMY	11 incoment. HL	76 F4 L
	MOV M, E	11 copy E(MSB) to	1 L pointer
1 1	1	The state of the s	74
2032	14LT 1.	Il end execution	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		en the section of the	A
			A. A.
<u> </u>	-	24 22	1 24

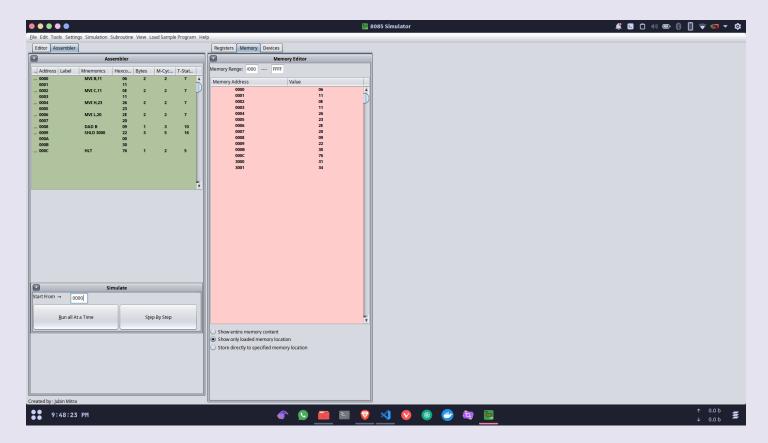
4						
	OLAVIA Palipula				PAGE N DATE	ю.
Address	Label	Maemonics	, Hex	Byte	g Micy	les 7-states
0000	N=, p)	MV1 903	11 00	· P	1 2 10, 7	2 7
000)	-	,	03	(***********************************		
0002		MUI. C.05	1.00	2	10 24 .	2 7
0003			05		1711	
0009		MV1 P,00		-	er i i i	D . 2
5005		1-1-1-0-0	00		1 1 feet	
0000		WALE DO DE	16	2	73,83 2	2
F000		1,000			- 1 11 pan	-1111/19
0008	1008	MOV A D.	0_0 7_a	9	. 1	<u></u>
0009		APP B	80		1	4007
A	3,5	MOUPA.	57	111-		L
7003	3	MOVAE	78	-6		1 1
0000	C.1	AC100	CF	3. 2.	0	7
0000	10	2 0	00	-		AT ACT
2000 F	ا الما	WONE G.	SE	CT1.	1.110	4
200P	1 1	DCRC	00	1	1	4
0010		TNZ 600P	C2	. ^		0 40 10
0011	4		08		y] (-) - 1	1206.1
0012			00			4000
0013		LX1 H, 3000		3	13	3000
0014			00		Y	
8015	3p. 1 5	N N N N N N N N N N N N N N N N N N N	30			The state of the s
20016		MOV M O	7-2		2	7
0019		INXH	23	1	1	6
8100		MOVME	73		2	7
9019		HLT	76	68	2	-
TO			40 (4)	Q	4 .	

3. Add two 16 bit numbers with DAD instruction and store it at 3000H with SHLD instruction.

```
MVI B,11H
MVI C,11H
MVI H,23H
MVI L,20H

DAD B
SHLD 3000H

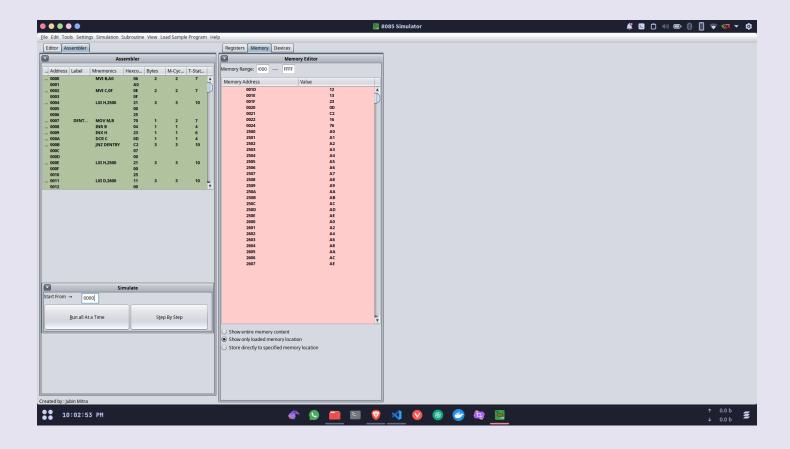
HLT
```



					Los recognitions			PMCE NO CASTE		
Code	' MUI	B 11 H	.01/	load	11	H	in	B		Figh
Co	10M	C'111	1 11	load	_15	H	in		12. W (10) 20 W 2	
1.	MUI	H 231	1 11	load		H.	in	H	or questione has	
F. Parage St.	Ivm	L, 20	H 11	Road	20	H	ia	L		
<i>(</i> **	DAD	8	- 11	add	-	1. 1. 18	of relations between the		-	and the second second second second
		3000	H						and the base of	North and American Street, or
	HLT	200 Page 120			px.	+	the state of the s	-	and the second second	
,									ner teer black setter	
Address	Mnem	ionics	1, 1	Hex	and the same of th	Bate		M-cycl	23	1-564
	was are freely make to be the control of the control		patence artistes, para constanting	agrospini i hatopanimend	Confession and the	the said was a few	and the same of th		Complete State	
0000	MUL	B-11	2.4c	00		7	a policy and an analysis of	.5	Section Sectio	7
0001			i k	17	and the second	A Company of the Comp	nedplay(lies		Day-tra floroscopiose	-
086 2	MUI	(1)	are really resolution from the property of	BE	gentaria carrieral	2	the contract of the same	2	/ runuman	1
0003		•	-	11	9_	A Jack	and partition of the		m Name of Street St	
5004	MUI	H;23	1	26	- Tarana	3	Called Bridge Section 1	2	ental Barriera	1
0000				2.3	and the same of the same of	Delay appropriate College	Tarabasa III		10	and the second second second second second
\$600	MUI	L 20	u 3.	2E	-	.2	alle to the first to the section is true to	2	-	7
00007	1	7		20		f #	nen selvan on pro-			
.0008	· DA D	·B	() A	09.		-1		3		10
D009	SHL	0 3000) A G	22		3		5		16
000 A		The state of the s	1	00		-				an in the second second
000B	*1			30	1.2	1. 1.	-		-	
0000	HLT		d is	76	1 11	1_		2	****	5
										27 13
. (4	1	- 55 gs	17		774			1	
- N	1		4			100			1	

4. Write a program to separate even numbers from the given list of 15 numbers starting from 2500H and store them from 2600H.

```
MVI B,A0
       MVI C,0F
       LXI H,2500
           MOV M,B
DENTRY:
       INR B
       INX H
       DCR C
       JNZ DENTRY
       LXI H,2500
       LXI D,2600
       MVI C,0F
            MOV A,M
MAIN:
       ANI 01
       JNZ ODD
       MOV A,M
       STAX D
       INX D
       INX H
ODD:
       DCR C
       JNZ MAIN
       HLT
```

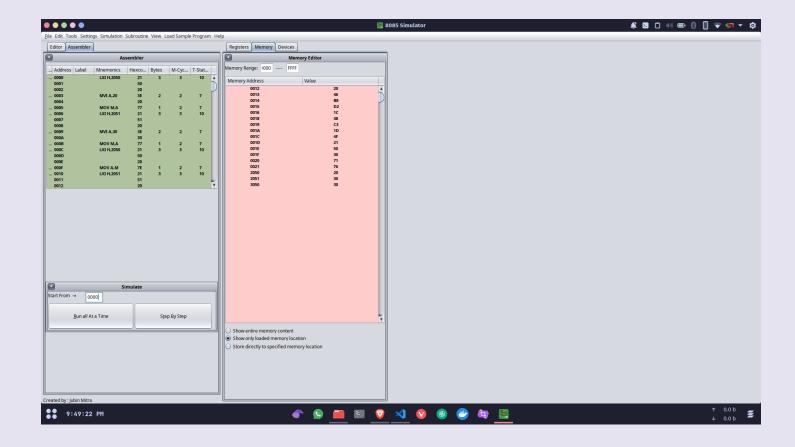


	M BOS MO
	CARE COARE
Code	and of the state o
(Dole-	MUI COEH 1/2002 OSH in C (counter)
	EXI H, 2500H. // load 250dt in HL
37	DENTRY:
	MOV M, 8 // copy from B to HCpointes
	INR B 1/ in croment date
	1 NX H / increment addr.
	DCR C // decrement counter
	JNZ DENTRY // repeat fill counter is zur
	LXI H, 2500H / load addr-1 in HL pair
	LXI D, 2600H 1/ load addr-2 in PE paus
· Marian	MVI COFMISTI load OFH [(16)0) in 10 (00
	MAIN:
	MOV A, M 11 topy from 44 pointer to A
	ANI DIM 11 AND A with DIH is give
,*	TNZ OPP // jump if A's content are odd
4.7	MOV A, M Il if ever, again loading from M STAX D: // store A in DE polates
	JAX D / store A in DE polater
1 H	000:
	TNX H 1/ increment HI pair (adds)
	DCR C // decrarent counter,
17	INZ MAIN // Jupeat till counter is zero
	HU / end execution
0.16	Marmonics Hex Buter M-cade: 1-state
Address	
(6000)	MVI BADH BE 21
2002	MVI C, OF OF 2 2 7
0003	o F
0004	1×1 H, 2500 21 3: 3 10

				FAGE NO.	`
Address				DATE Marcyclus	" Tred A
newass	Lakel Mnemonics	tler	Byles	The Carolin) DVe
0000		00	1111		
D00 C		52	1	1/24	A harry
	PENTRY MOUM, B	70	(1)	. 1	
6008	INRB	04		1	
000 9	1NX H	23	4	1	6
ACOO	DCR C	00		2	<u> </u>
000 B	JHZ DENTRY	(2	3	3	0
DOOC	Topological States	07		*	
5000	and it has you	00	11414	SMI	-
200E	LX1 H, 2500	2)	3	3	10
2000	r still-attoriteet	00	<u> </u>	121	
0010	1 - 1 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	25	70 J 9	1 3 3	· V
0017	CX1 0.7600.	21	4 -1.35	1425	10
0012		00		; : 41.•	
0013	Market Jan 1997 That	26	1-1 64	Weller	<u></u>
5014	WAI C'OF	- 0E	· · · · · · · · · · · · · · · · · · ·	10:1.2	- 7
2015	0 7 9.00	OF	9000	54,1	1.50
0016	MAIN MOVA, M.	35	1.6 19	V117	_ 7
0013	ANKOLOGI	E6	2	1112	7
0018		01	9	* - !	
0019	JN2 0D0	C2	3 -	11.3	10
0014	Sar JH Carry Sici	IF	14	x 1/2 1	
08 18	the second of the second of second	00	5	4. (6	
0010	MOV AM	3F'	Minny	2	7
0810	STA-X: D	. 12	- 1	11/2	不
9018	1 N X D			,	6
001E	10. H X41 1000	23	- A	17. No.	6
0020	DCR ()	00	100 / Mg	VAJ.	4
0021	JNZ MAIN	(2	3	3	1 210
60 22	3.74	10		1///	
0823		00			
0024	#LT	76	101 10 11	12/2	5

5. Write a program to find a maximum of two given 8-bit number stored at 2050H and 2051H. Store the largest value at 3050H.

```
LXI H, 2050H
MVI A, 20H
MOV M,A
LXI H, 2051H
MVI A, 30H
MOV M,A
LXI H, 2050H
MOV A,M
LXI H, 2051H
MOV B,M
CMP B
JNC ABIG
MOV C,B
JMP EXITLOOP
ABIG:
MOV C,A
EXITLOOP:
LXI H,3050H
MOV M,C
HLT
```



		PAGE NO OATE	
A second to the		CAVE CAVE	
Coda	LXI H, ZOSOH	11 hoad sosoH in HL	orie
	WAT & SOH	11 load 20 H in A	1000
	mov m, A	11 stere A in HL poi	te
	LX1 H, 2051H	11 load 2051 H in HL	pai
1	WAT 4 30A.	11 copy of A with 2 10 Mpsi	rote
The second of th	MOV M, A	11 copy A in MC po	ide
	LX1 H, 2050H		100
And the second	MON & W	I load 2050 H in HL	pa
A Armery	LX1 4, 2051H	Il copy from HI pointer	to
	MOV B, M	11 200g 5021 H 1/ HE	Pai
	CMP B	Il copy from HL pointer	to
	INC BRIG	11 compare A with	3
	MOV CB.	Il copy from B to CC	
1	JMP EXITLOOP	Il anconditionally jump	ins w
	ARIG:		
	MOV. C, A	11 if AGOB, load A in	-
	EXIT LOOP:		
	EX1 H, 3050H	11 load 3050H in HLE	ai
	MOV M, C	told troin (to HI	ries
	HLT	Il end execution	-
Address	Macmonics	Hox Bute M-c 1 7	100
	7-1h	flox Byte, M-cydes T-	डोव
0000	1x1 42050	21 3	
1000	,	50	10
3007		20	-
0003	MV1 R 20	3 £ 2 2	7
1	3 3	2011	
5004		77 1 2	7.5
0003	MON W. A	C.	R
9000	MOV M, A LX1 H, 2051	21 3 3	10
1		01	70

() () () () () ()	PAGE NO.
A.	The state of the s
	Harris April Write Harris Harris Harris
041000	Britary Macale, John
Address	Cabel Memories
2020	(2005 /3 /3)
0003	MVI A 30 3E 2 7
0009	30 12 yara
A 600	MOV M A 77 1 2 7
000 B	70(00)11 17
000 C	LXI II, W
10000	501
SOOF	20° 2 2 3
000 E	(OV H, M)
0010	LXI H, as I
0011	303 Par - Cam: 11 \$1784- 241
0012	or - 1500 - 100 1 20 0 VCH.
8013	MOV-BM 1 946-1-1-12 7
5014	CMPB B8: 10 4
0015	JNC + B16 DZ, 3 10
0016	1 Con 1127
0017	U
0018	or mov CB 42 1 19
0019	JMP EXITION P C3 37 3 1 3 10
2014	CD.
0018	120 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ARIGO MOVCA 4F 1 14
5010	EXITLOOP LX1 43050+ 27543 x 3 12
20016	50
2001	30
0020	MOV. M. (7) 61/1/1/2 2 3
- 6021	HLT 76 1 25
- Constitution	The Division of the work of the