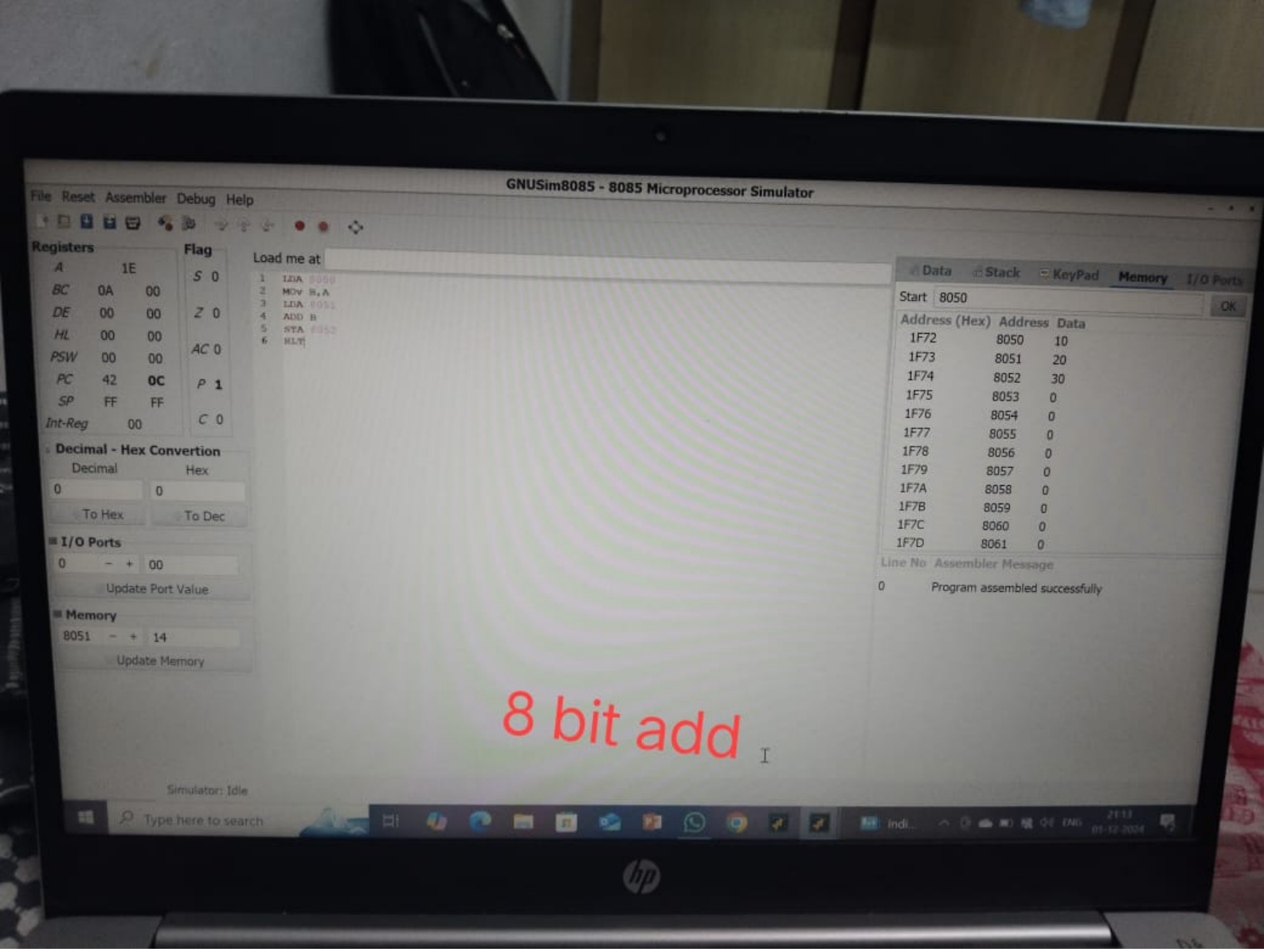
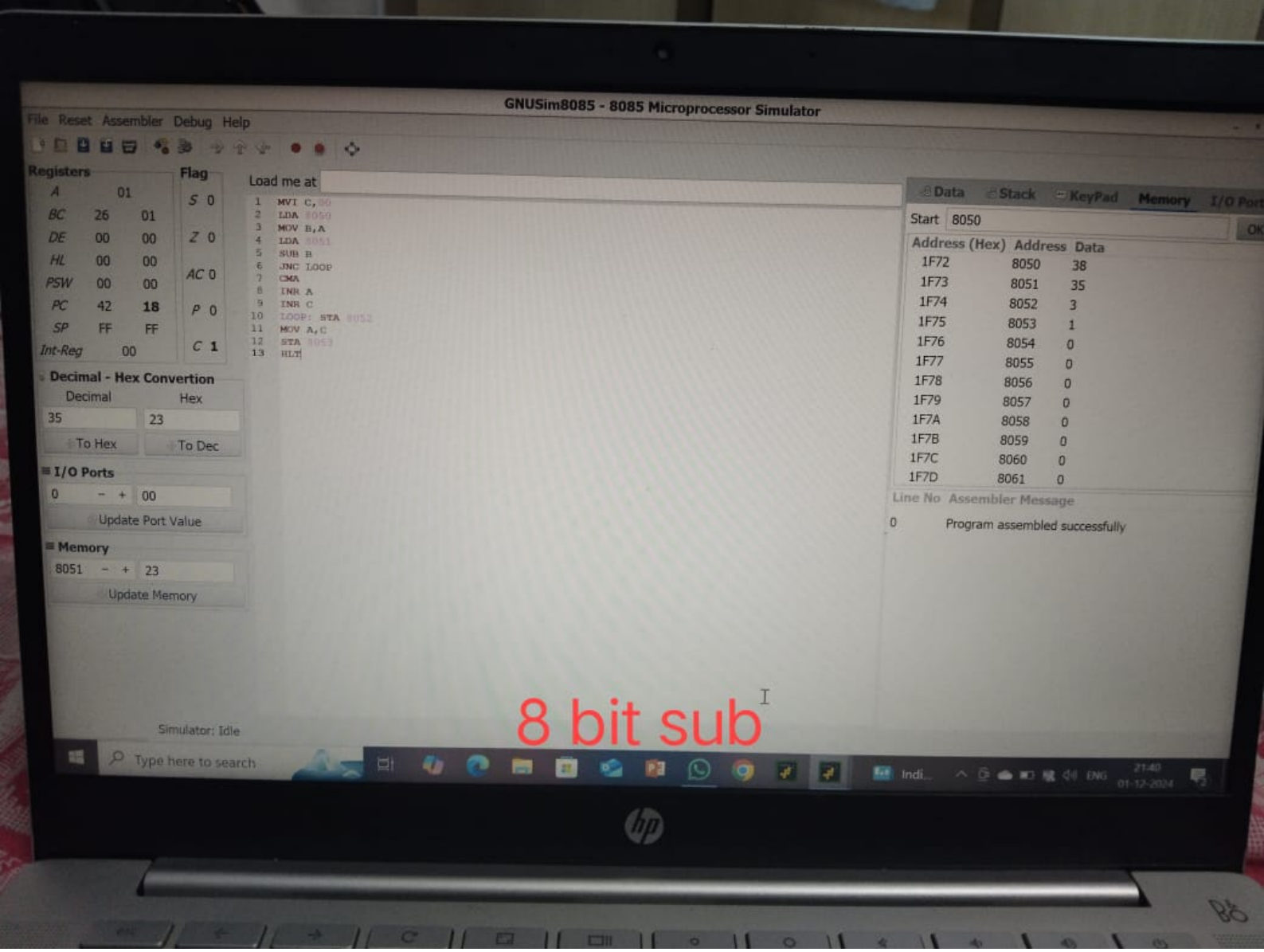
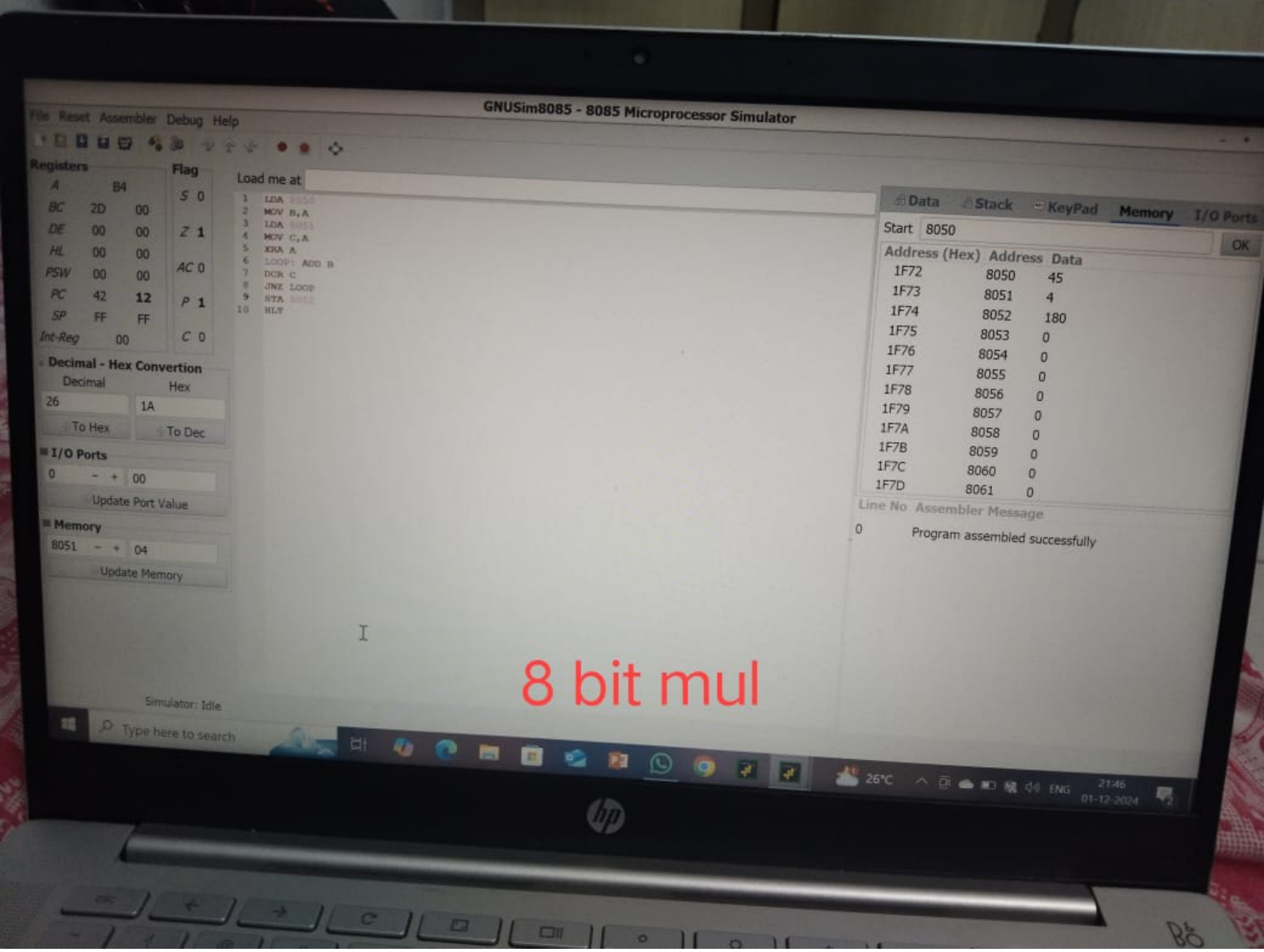
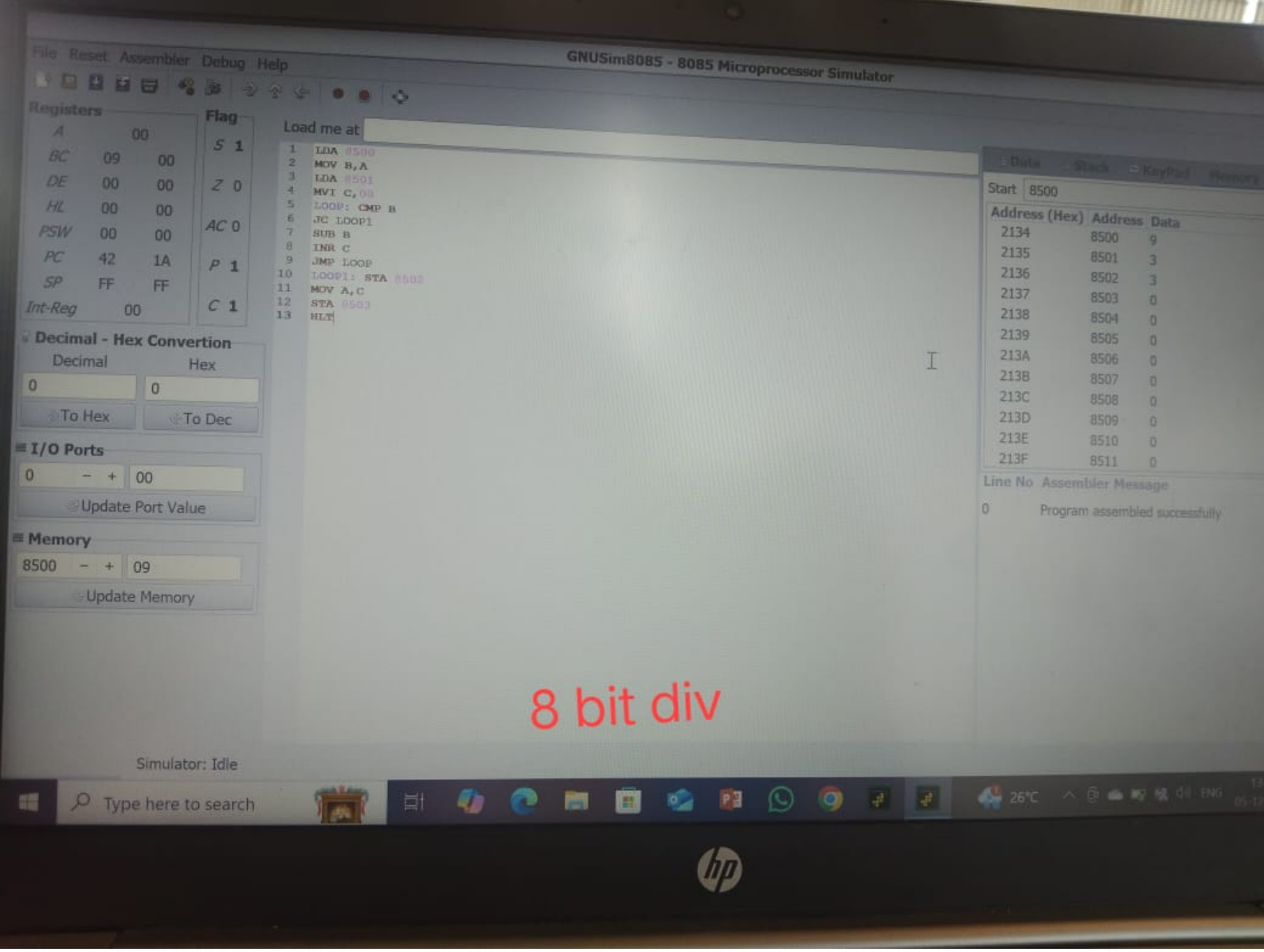
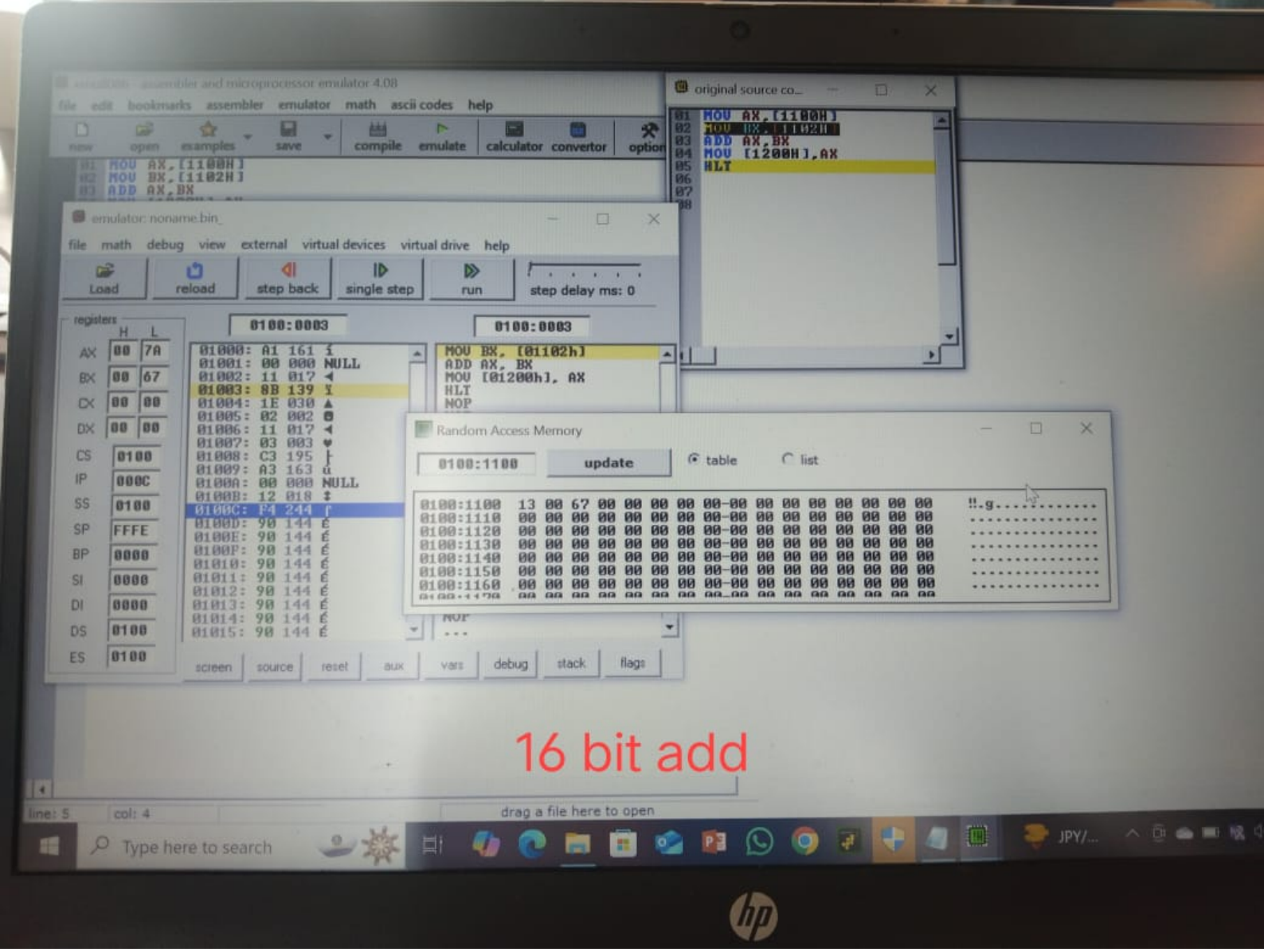
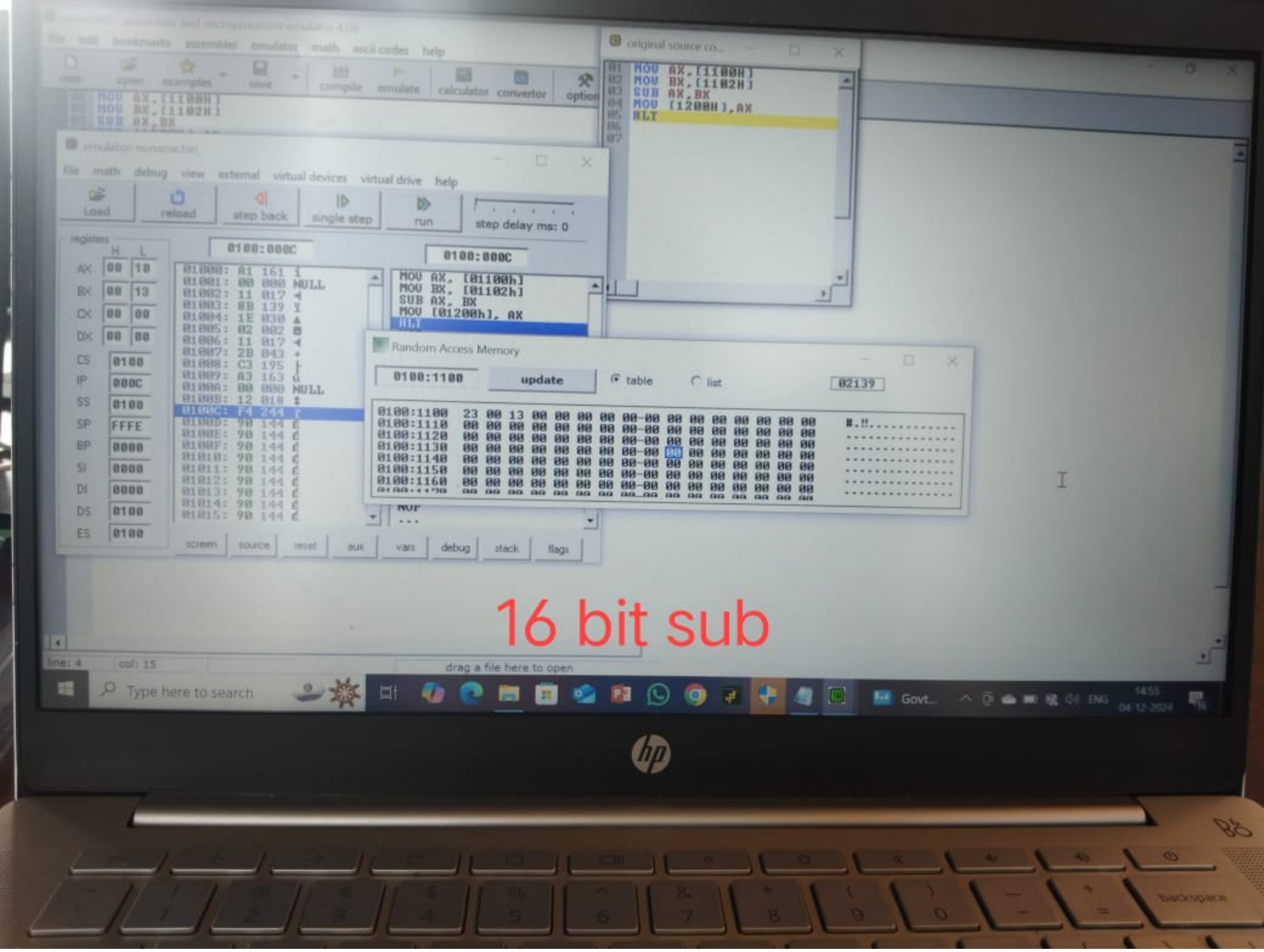

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
Load me at
Data Stack KeyPad Memory I/O Ports
Start 8050
OK
Address (Hex) Address Data
1F72 8050 10
1F73 8051 20
1F74 8052 30
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
Update Memory
8 bit add
Simulator: Idle
Type here to search

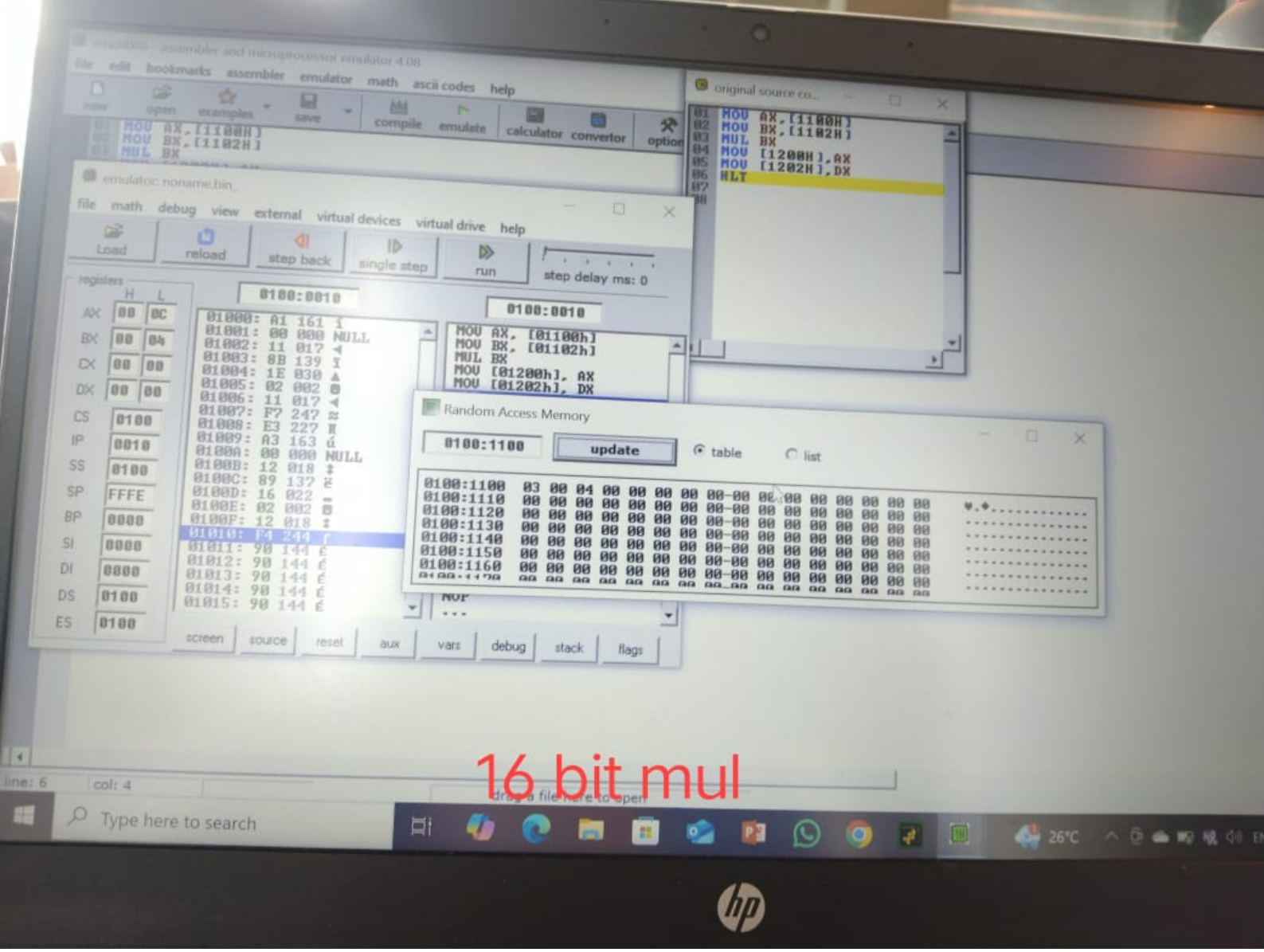

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
Load me at
1 MVI C,00
2 LDA 8050
3 MOV B,A
4 LDA 8051
5 SUB B
6 JNC LOOP
7 CMA
8 INR A
9 INR C
10 LOOP: STA 8052
11 MOV A,C
12 STA 8053
13 HLT
Data
Stack
KeyPad
Memory
I/O Ports
Start 8050
Address (Hex) Address Data
1F72 8050 38
1F73 8051 35
1F74 8052 3
1F75 8053 1
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
35
23
To Hex
To Dec
I/O Ports
Update Port Value
Memory
8051 23
Update Memory
Simulator: Idle
8 bit sub
Type here to search

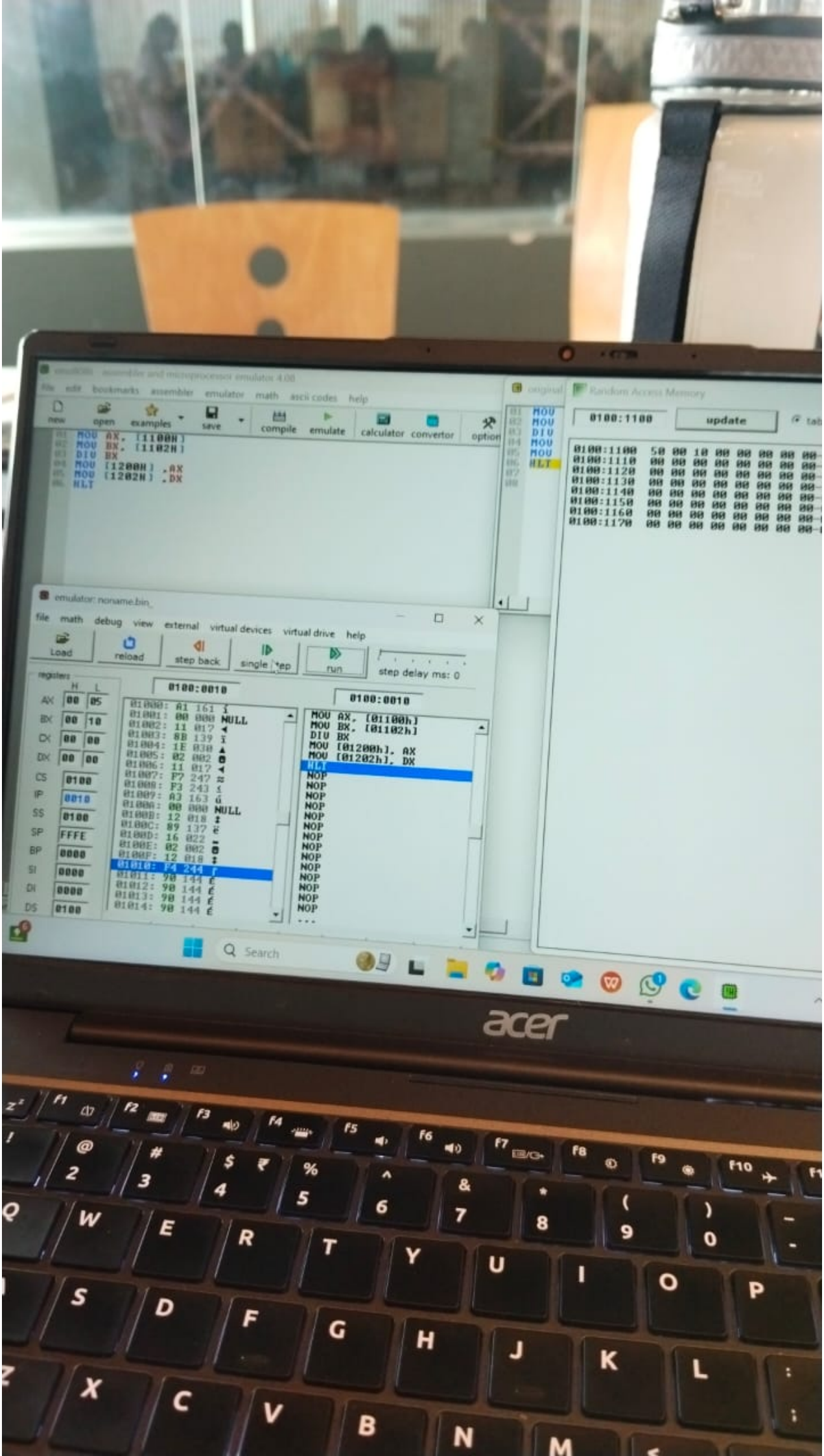

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
Load me at
Data Stack KeyPad Memory I/O Ports
Start 8050
OK
Address (Hex) Address Data
1F72 8050 45
1F73 8051 4
1F74 8052 180
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
26
1A
To Hex
To Dec
I/O Ports
Update Port Value
Memory
8051 04
Update Memory
Simulator: Idle
8 bit mul
Type here to search
26°C
ENG
21:46
01-12-2024

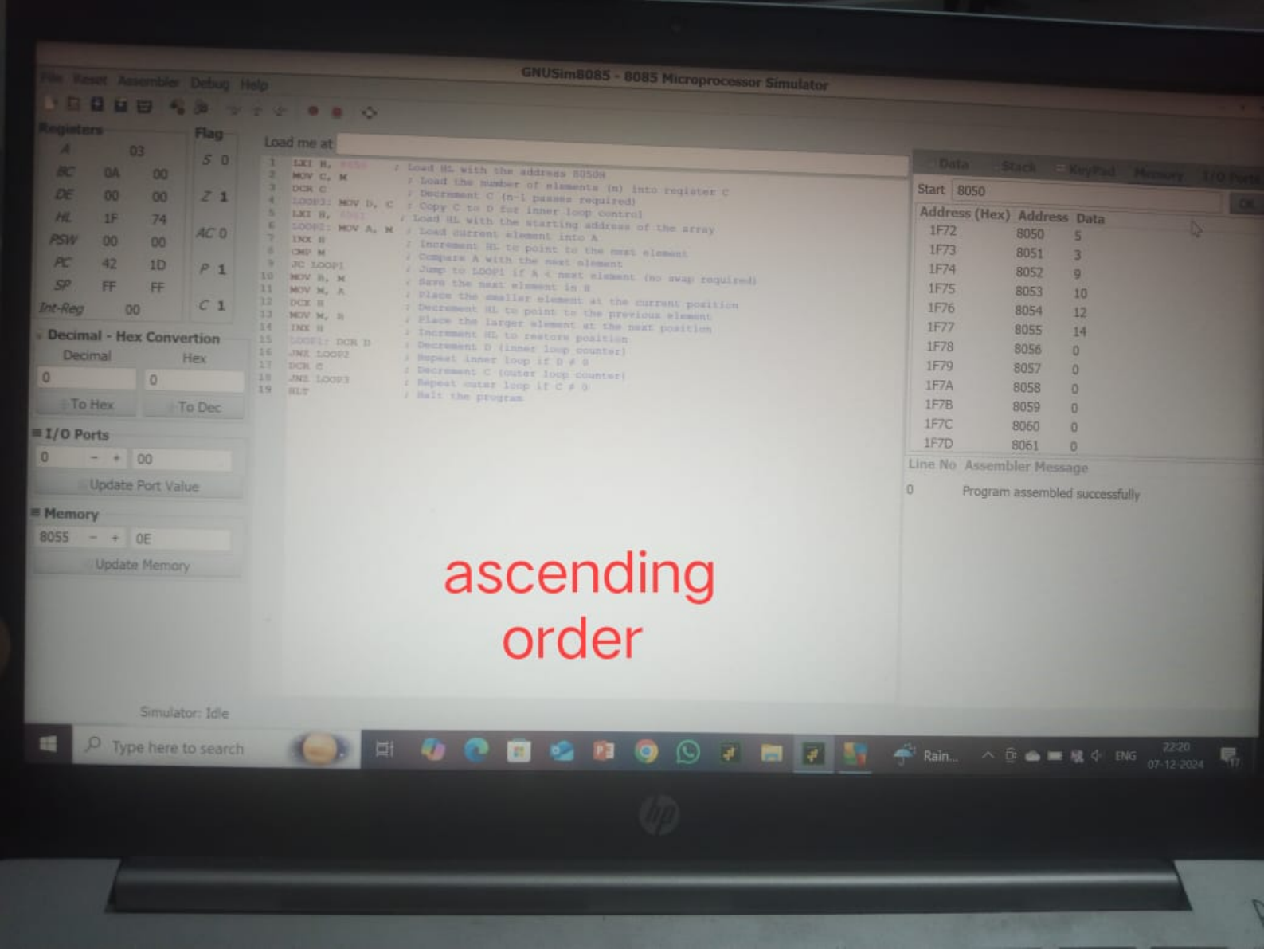

File Reset Assembler Debug Help
GNUSim8085 - 8085 Microprocessor Simulator
Registers
Flag
A 00
BC 09 00
DE 00 00
HL 00 00
PSW 00 00
PC 42 1A
SP FF FF
Int-Reg 00
S 1
Z 0
AC 0
P 1
C 1
Load me at
1 LDA 8500
2 MOV B,A
3 LDA 8501
4 MVI C,00
5 LOOP: CMP B
6 JC LOOP1
7 SUB B
8 INR C
9 JMP LOOP
10 LOOP1: STA 8502
11 MOV A,C
12 STA 8503
13 HLT
Start 8500
Address (Hex) Address Data
2134 8500 9
2135 8501 3
2136 8502 3
2137 8503 0
2138 8504 0
2139 8505 0
213A 8506 0
213B 8507 0
213C 8508 0
213D 8509 0
213E 8510 0
213F 8511 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
0
0
To Hex
To Dec
I/O Ports
0 00
Update Port Value
Memory
8500 09
Update Memory
8 bit div
Simulator: Idle
Type here to search
26°C

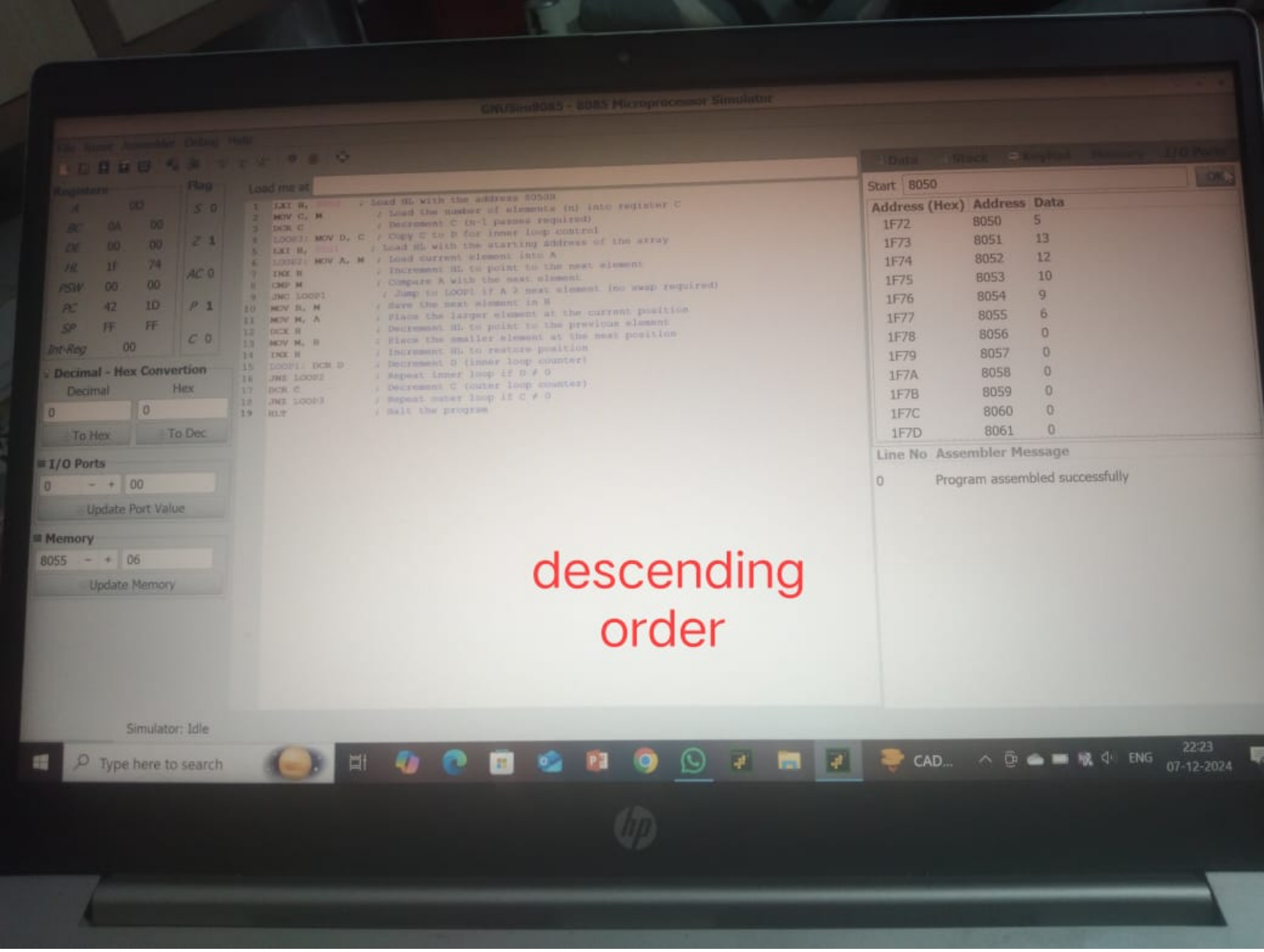

original source co...
MOV AX,[1100H]
MOV BX,[1102H]
ADD AX,BX
MOV [1200H],AX
HLT
emulator: noname.bin
file math debug view external virtual devices virtual drive help
Load
reload
step back
single step
run
step delay ms: 0
registers
AX 00 7A
BX 00 67
CX 00 00
DX 00 00
CS 0100
IP 000C
SS 0100
SP FFFE
BP 0000
SI 0000
DI 0000
DS 0100
ES 0100
0100:0003
0100:0003
MOV BX, [0102h]
ADD AX, BX
MOV [0200h], AX
HLT
NOP
screen source reset aux vars debug stack flags
Random Access Memory
0100:1100
update
table
list
0100:1100 13 00 67 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1110 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1120 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1130 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1140 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1150 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
0100:1160 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
16 bit add
line: 5
col: 4
drag a file here to open
Type here to search

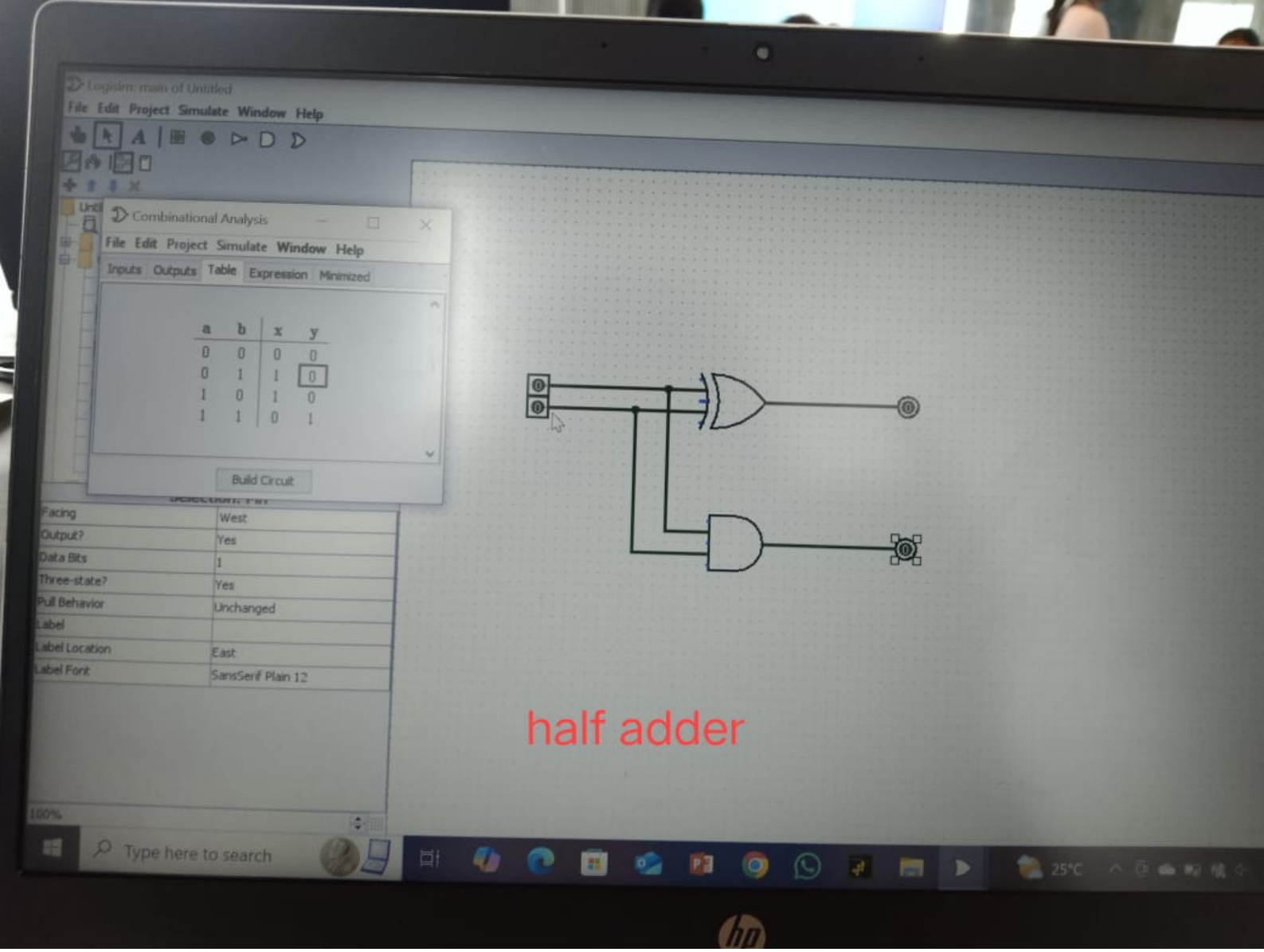

original source co...
MOV AX,[1100H]
MOV BX,[1102H]
SUB AX,BX
MOV [1200H],AX
HLT
emulator noname.bin
file math debug view external virtual devices virtual drive help
Load
reload
step back
single step
run
step delay ms: 0
registers
0100:000C
MOV AX, [01100h]
MOV BX, [01102h]
SUB AX, BX
MOV [01200h], AX
HLT
Random Access Memory
0100:1100
update
table
list
02139
16 bit sub
drag a file here to open
Type here to search

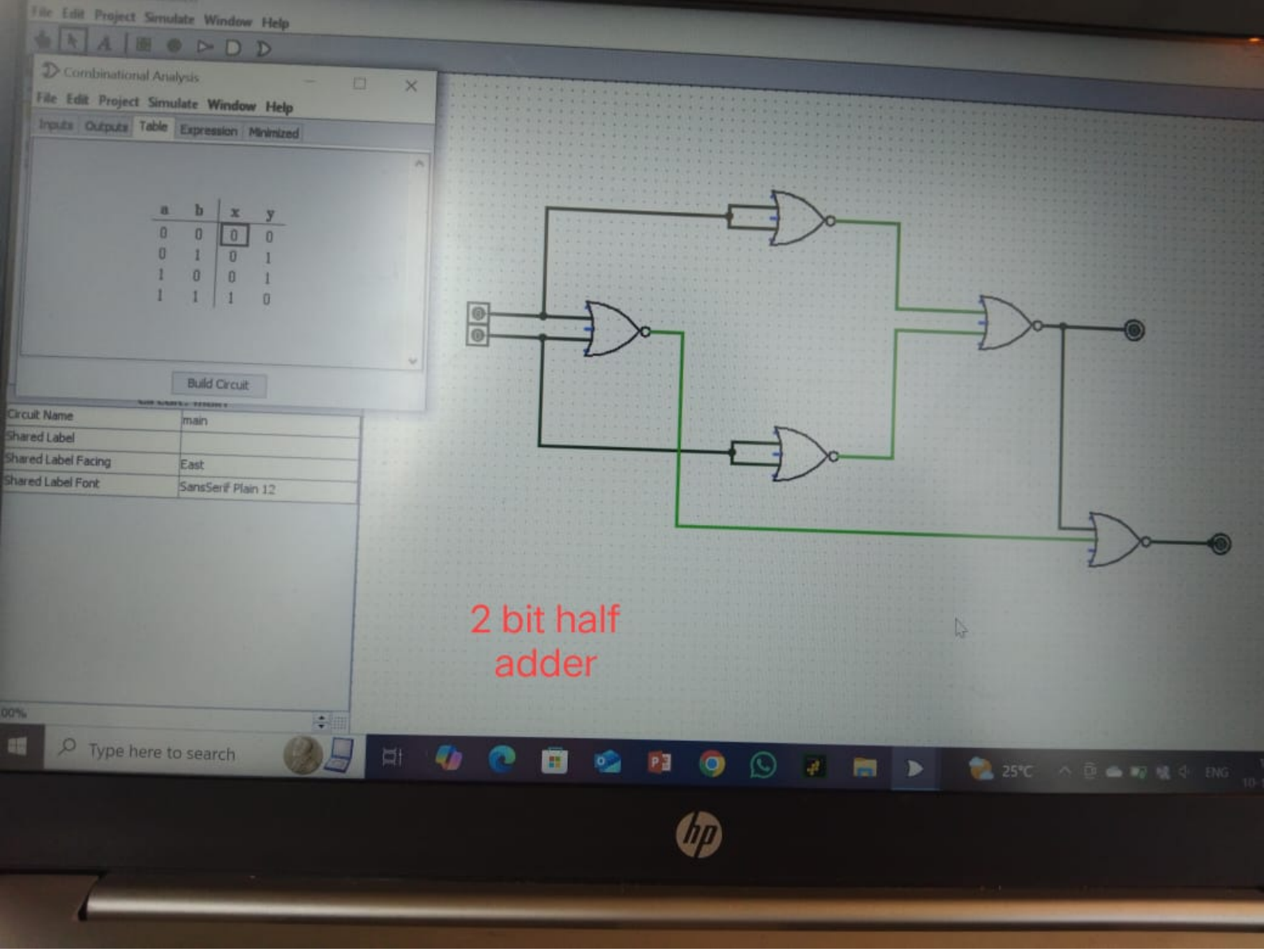

16 bit mul

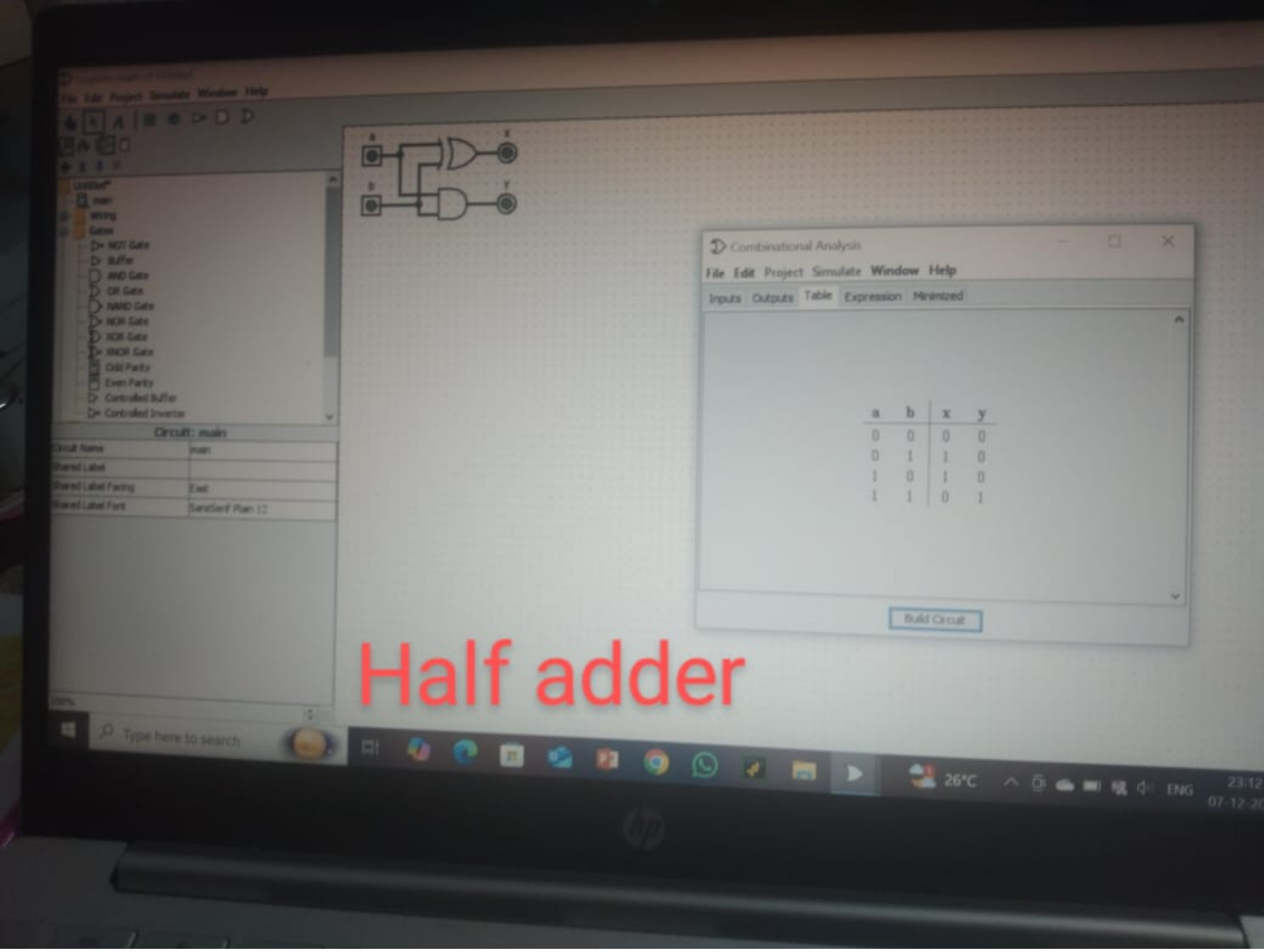

MOV AX, [1100H]
MOV BX, [1102H]
DIV BX
MOV [1200H], AX
MOV [1202H], DX
HLT
emulator: noname.bin
file math debug view external virtual devices virtual drive help
Load reload step back single step run step delay ms: 0
0100:0010
0100:1100
update
MOV AX, [01100h]
MOV BX, [01102h]
DIV BX
MOV [01200h], AX
MOV [01202h], DX
HLT
NOP
acer

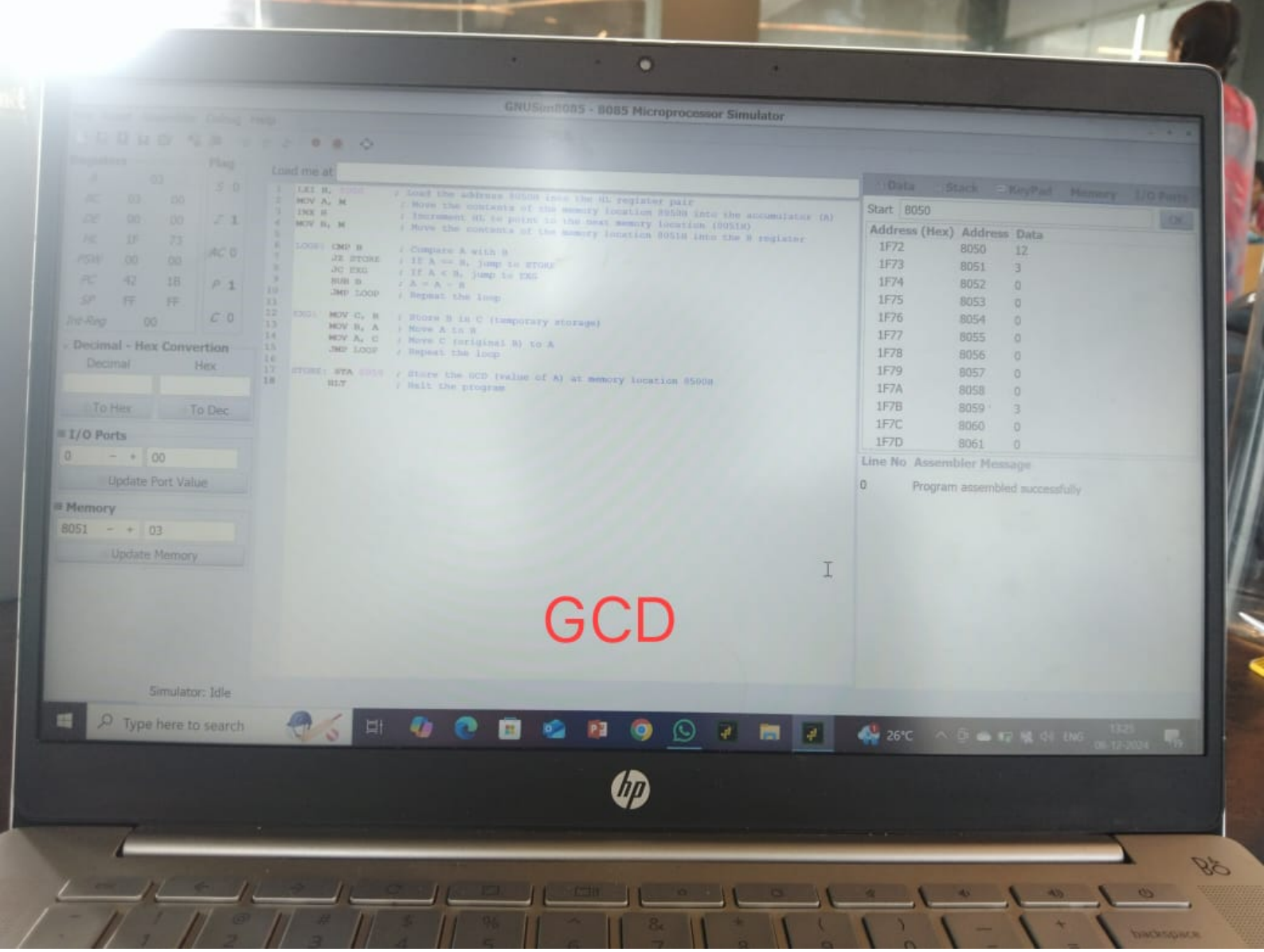

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
A 03
BC 0A 00
DE 00 00
HL 1F 74
PSW 00 00
PC 42 1D
SP FF FF
Int-Reg 00
S 0
Z 1
AC 0
P 1
C 1
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
Update Memory
Load me at
1 LXI H, 8050 ; Load HL with the address 8050H
2 MOV C, M ; Load the number of elements (n) into register C
3 DCR C ; Decrement C (n-1 passes required)
4 LOOP3: MOV D, C ; Copy C to D for inner loop control
5 LXI H, 8051 ; Load HL with the starting address of the array
6 LOOP2: MOV A, M ; Load current element into A
7 INX H ; Increment HL to point to the next element
8 CMP M ; Compare A with the next element
9 JC LOOP1 ; Jump to LOOP1 if A < next element (no swap required)
10 MOV B, M ; Save the next element in B
11 MOV M, A ; Place the smaller element at the current position
12 DCX H ; Decrement HL to point to the previous element
13 MOV M, B ; Place the larger element at the next position
14 INX H ; Increment HL to restore position
15 LOOP1: DCR D ; Decrement D (inner loop counter)
16 JNZ LOOP2 ; Repeat inner loop if D ≠ 0
17 DCR C ; Decrement C (outer loop counter)
18 JNZ LOOP3 ; Repeat outer loop if C ≠ 0
19 HLT ; Halt the program
Data
Stack
KeyPad
Memory
I/O Ports
Start 8050
OK
Address (Hex) Address Data
1F72 8050 5
1F73 8051 3
1F74 8052 9
1F75 8053 10
1F76 8054 12
1F77 8055 14
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
ascending order
Simulator: Idle
Type here to search
Rain...
ENG
22:20
07-12-2024

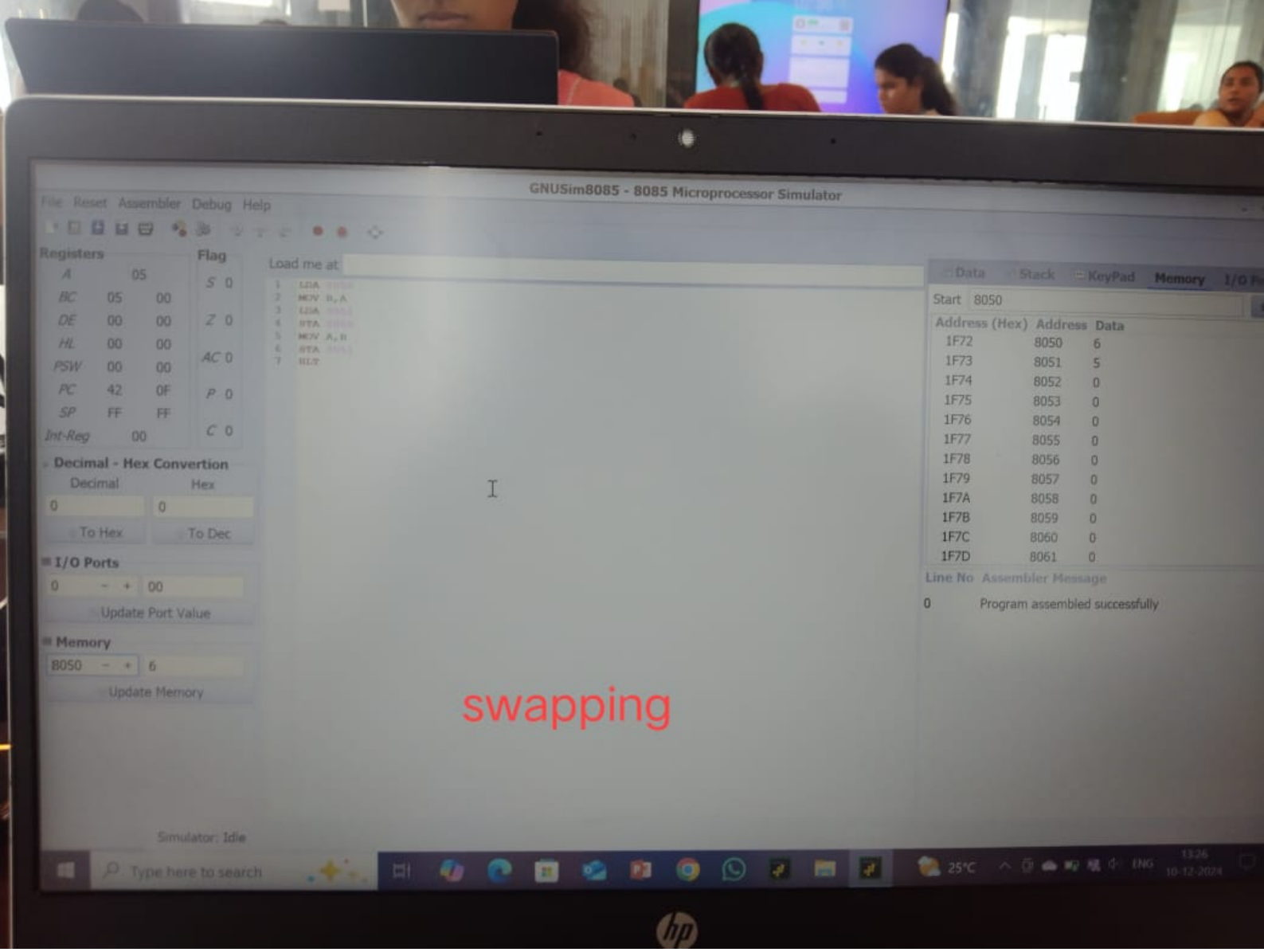

GNUSim8085 - 8085 Microprocessor Simulator
Load ms at
descending
order
Simulator: Idle
Type here to search
ENG
22:23
07-12-2024

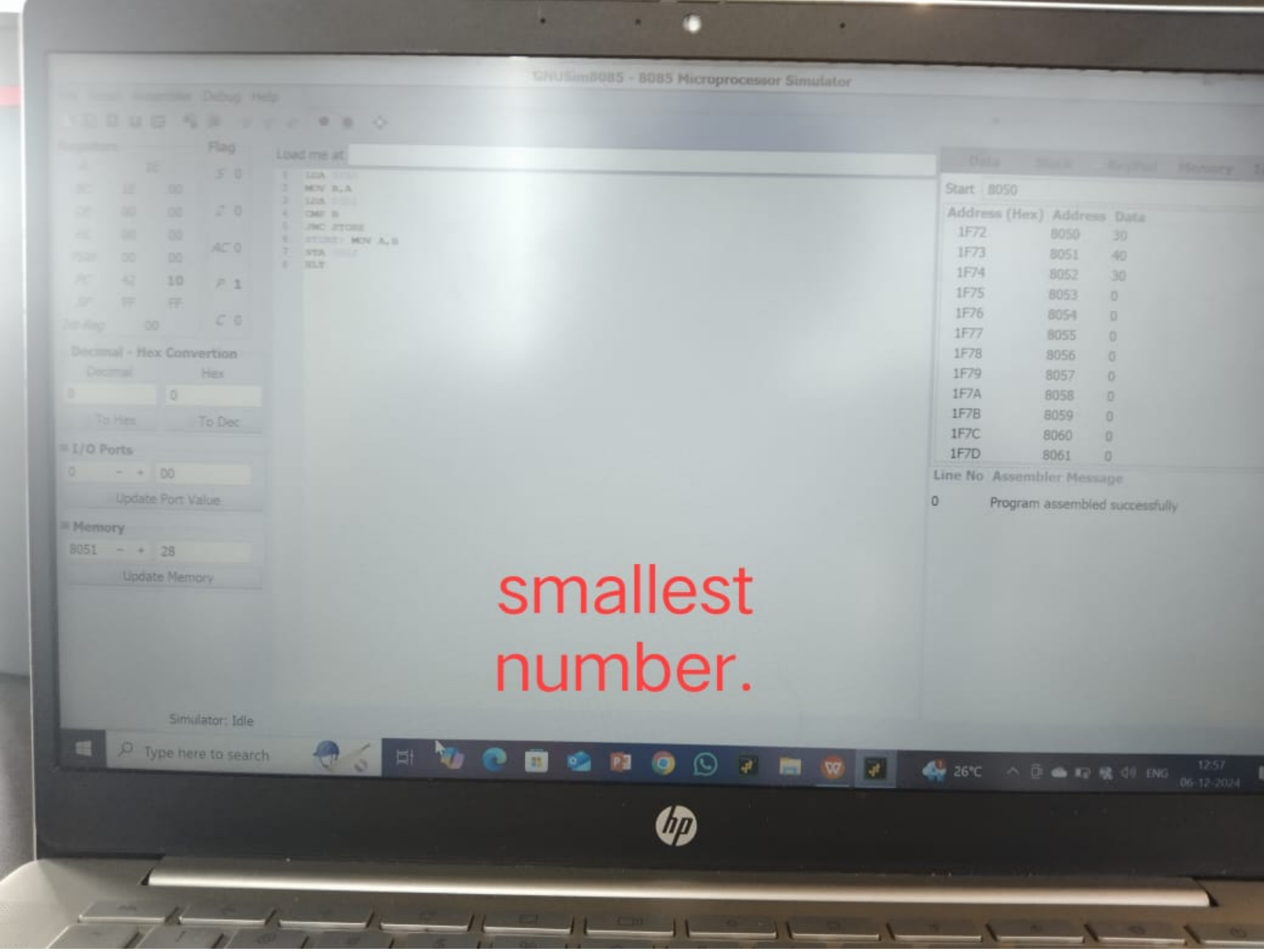

Logisim: main of Untitled
File Edit Project Simulate Window Help
Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 1 0
1 0 1 0
1 1 0 1
Build Circuit
Facing West
Output? Yes
Data Bits 1
Three-state? Yes
Pull Behavior Unchanged
Label
Label Location East
Label Font SansSerif Plain 12
100%
half adder
Type here to search
25°C

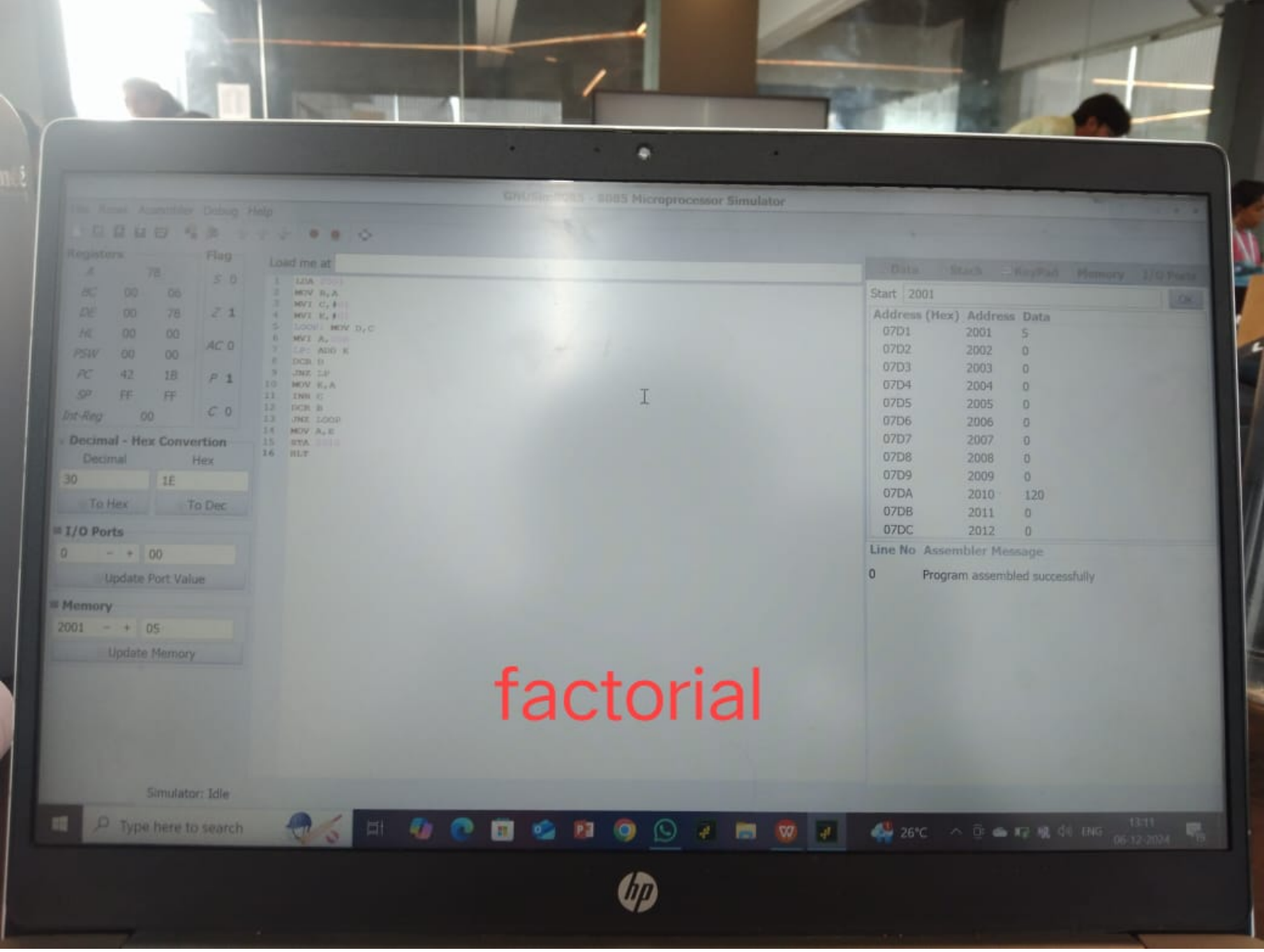

File Edit Project Simulate Window Help
Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 0 1
1 0 0 1
1 1 1 0
Build Circuit
Circuit Name main
Shared Label
Shared Label Facing East
Shared Label Font SansSerif Plain 12
2 bit half adder
Type here to search
25°C

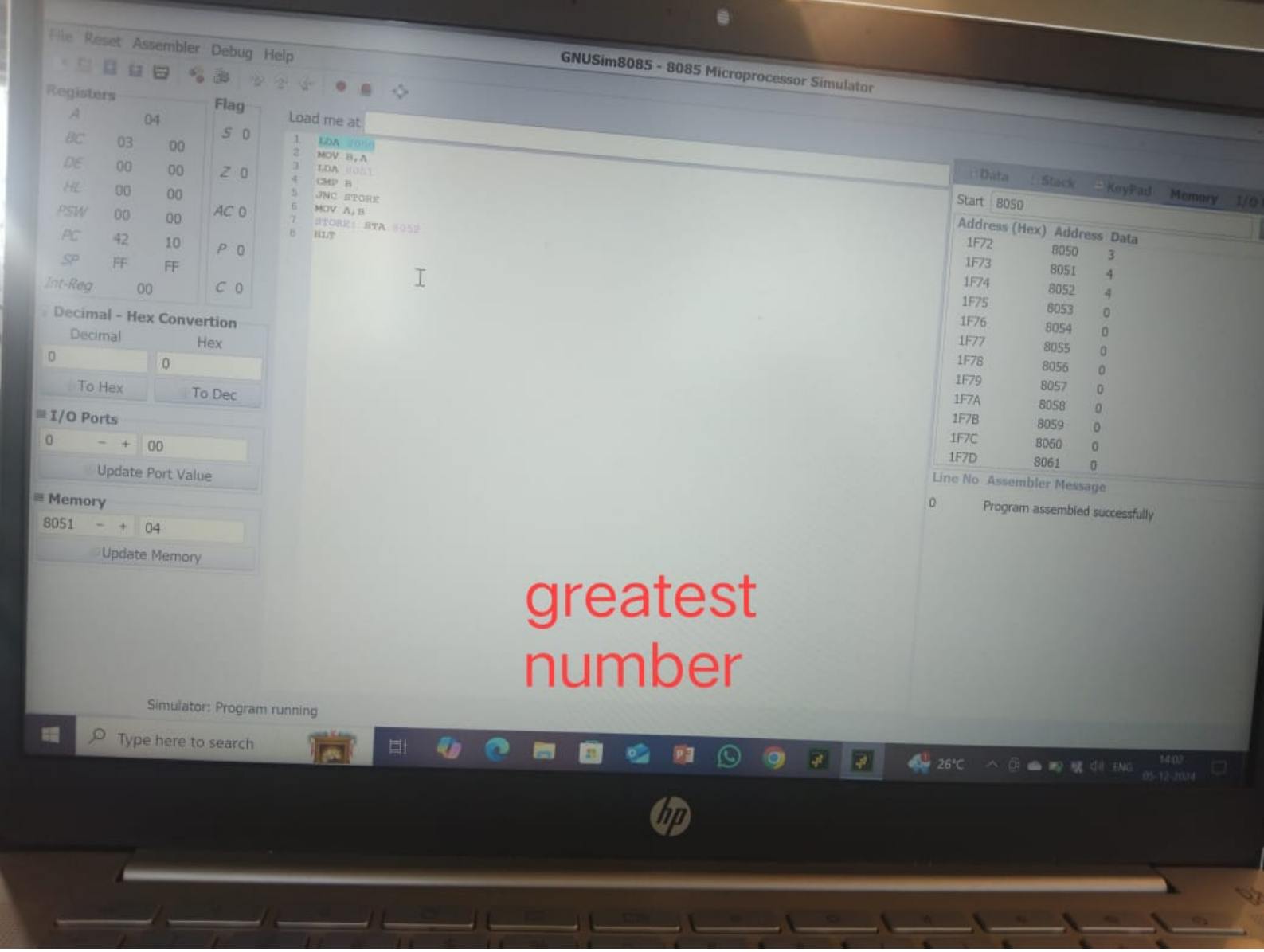

Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 1 0
1 0 1 0
1 1 0 1
Build Circuit
Circuit: main
Half adder
Type here to search
26°C
ENG

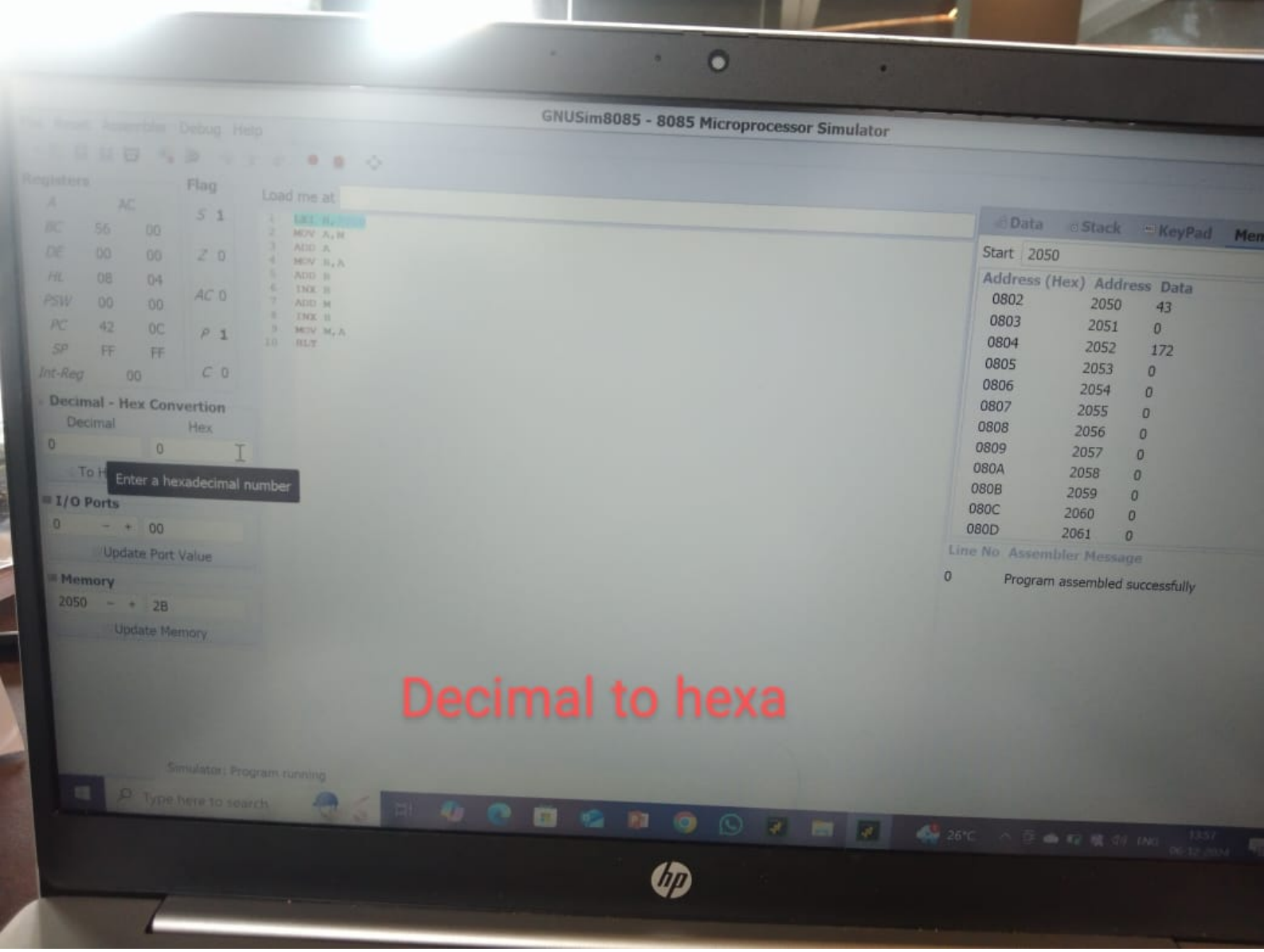

GNUSim8085 - 8085 Microprocessor Simulator
Load me at
LXI H, 8500 ; Load the address 8500H into the HL register pair
MOV A, M ; Move the contents of the memory location 8500H into the accumulator (A)
INX H ; Increment HL to point to the next memory location (8501H)
MOV B, M ; Move the contents of the memory location 8501H into the B register
LOOP: CMP B ; Compare A with B
JZ STORE ; If A == B, jump to STORE
JC EXG ; If A < B, jump to EXG
SUB B ; A = A - B
JMP LOOP ; Repeat the loop
EXG: MOV C, B ; Store B in C (temporary storage)
MOV B, A ; Move A to B
MOV A, C ; Move C (original B) to A
JMP LOOP ; Repeat the loop
STORE: STA 8500 ; Store the GCD (value of A) at memory location 8500H
HLT ; Halt the program
Data
Stack
KeyPad
Memory
I/O Ports
Start 8050
OK
Address (Hex) Address Data
1F72 8050 12
1F73 8051 3
1F74 8052 0
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 3
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
8051 03
Update Memory
GCD
Simulator: Idle
Type here to search
26°C

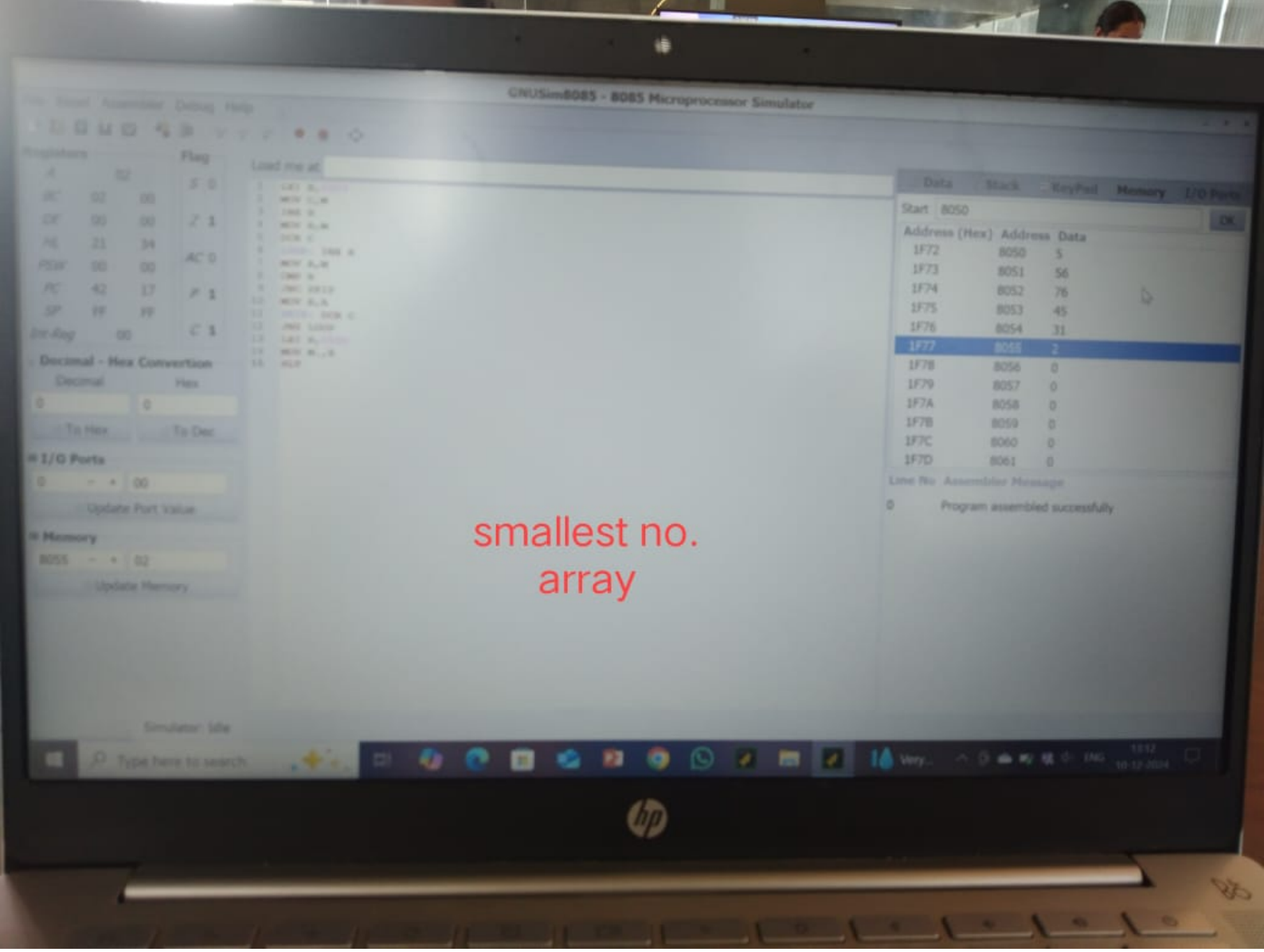

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
Load me at
Data Stack KeyPad Memory I/O
Start 8050
Address (Hex) Address Data
1F72 8050 6
1F73 8051 5
1F74 8052 0
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
Update Memory
Line No Assembler Message
0 Program assembled successfully
swapping
Simulator: Idle
Type here to search

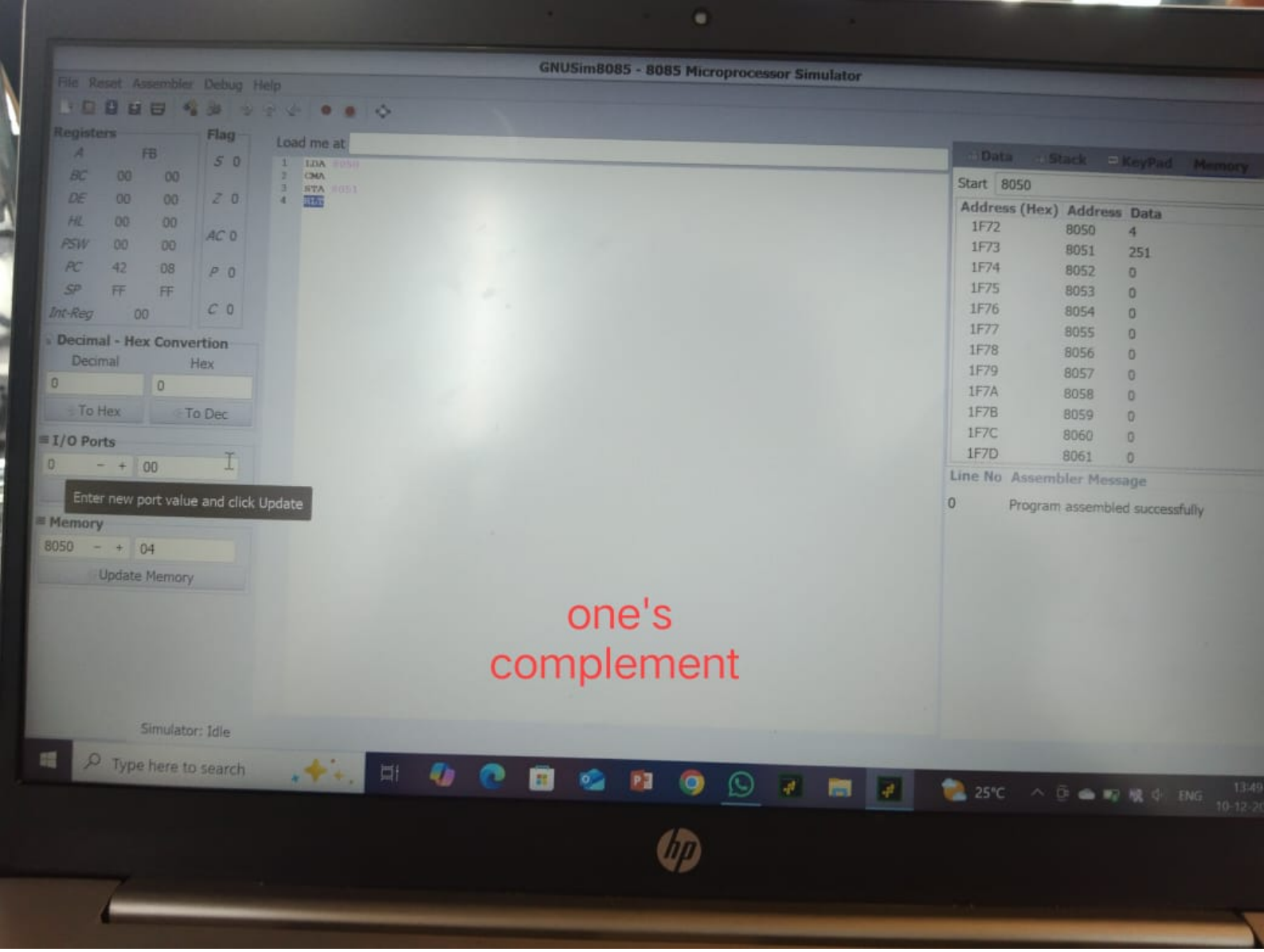

GNUSim8085 - 8085 Microprocessor Simulator
Flag
Load me at
Start 8050
Address (Hex) Address Data
1F72 8050 30
1F73 8051 40
1F74 8052 30
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
8051 28
Update Memory
Simulator: Idle
smallest
number.
Type here to search
26°C
ENG
12:57
06-12-2024

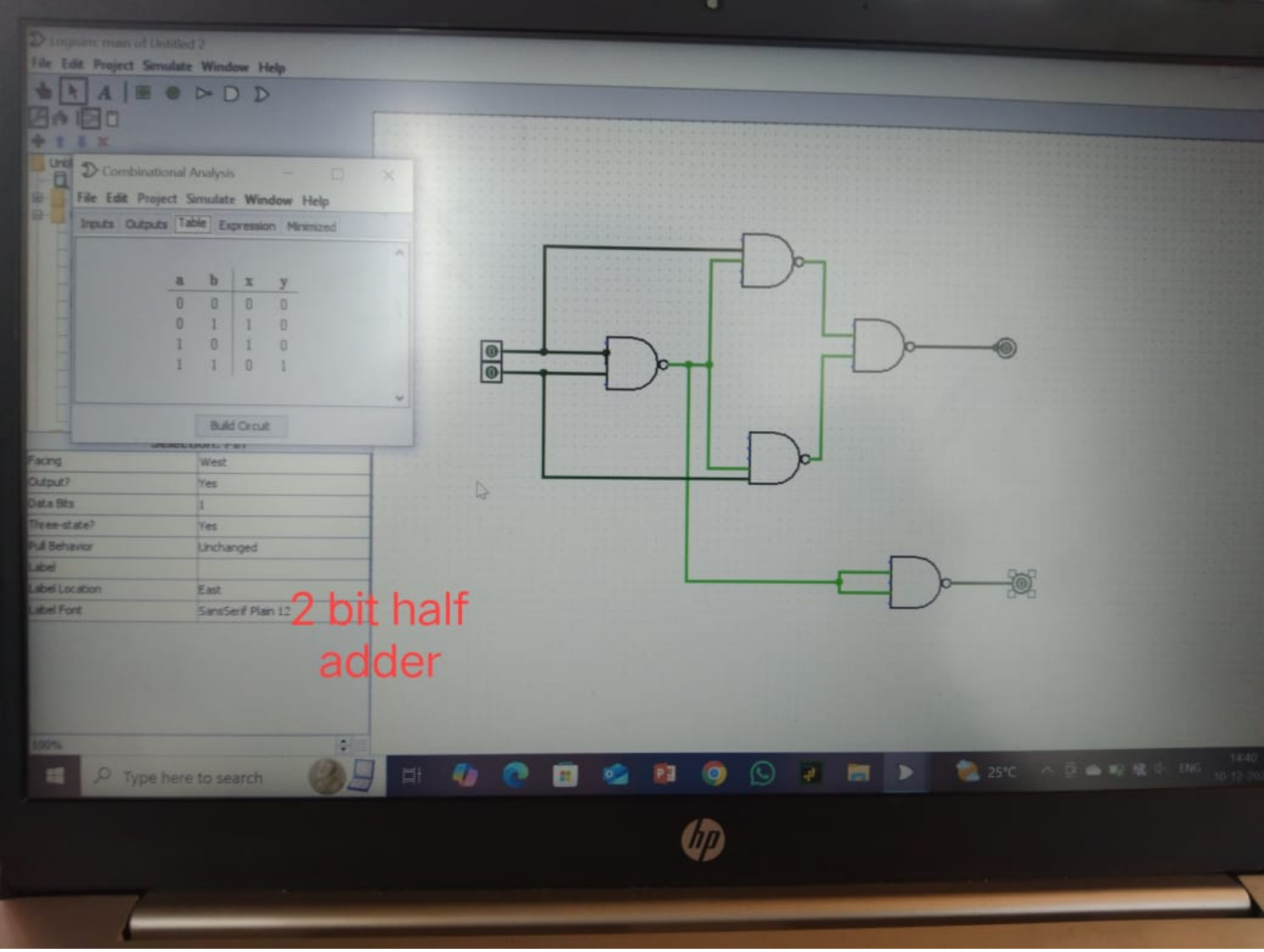

8085 Microprocessor Simulator
Load me at
Start 2001
Address (Hex) Address Data
07D1 2001 5
07D2 2002 0
07D3 2003 0
07D4 2004 0
07D5 2005 0
07D6 2006 0
07D7 2007 0
07D8 2008 0
07D9 2009 0
07DA 2010 120
07DB 2011 0
07DC 2012 0
Line No Assembler Message
0 Program assembled successfully
Decimal - Hex Convertion
Decimal Hex
30 1E
To Hex To Dec
I/O Ports
Update Port Value
Memory
2001 05
Update Memory
Simulator: Idle
factorial
Type here to search
26°C

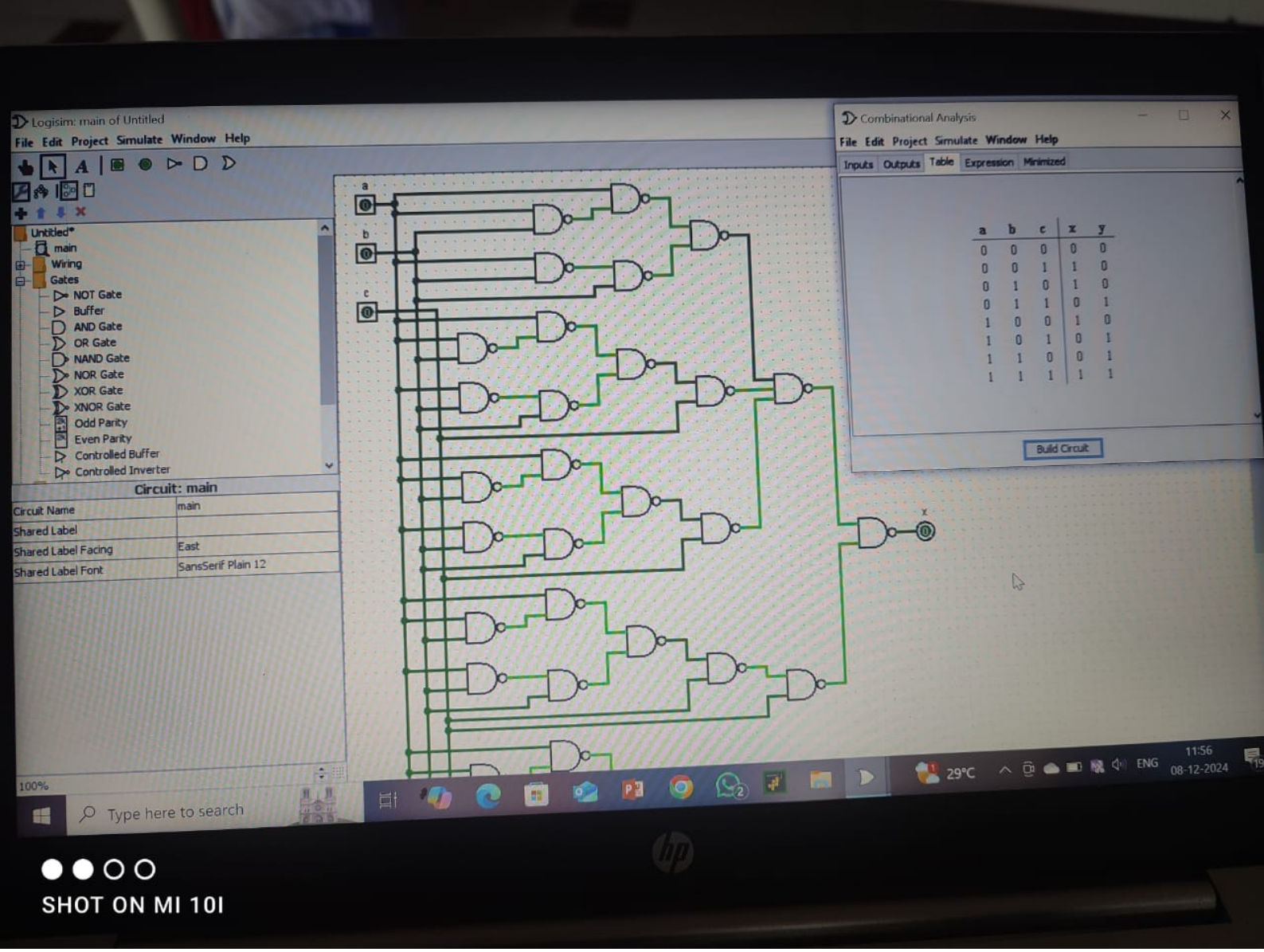

File Reset Assembler Debug Help
GNUSim8085 - 8085 Microprocessor Simulator
Registers
Flag
Load me at
Data Stack KeyPad Memory I/O
Start 8050
Address (Hex) Address Data
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
Update Memory
Line No Assembler Message
Program assembled successfully
greatest
number
Simulator: Program running
Type here to search


GNUSim8085 - 8085 Microprocessor Simulator
Registers
Flag
Load me at
Data
Stack
KeyPad
Start 2050
Address (Hex) Address Data
0802 2050 43
0803 2051 0
0804 2052 172
0805 2053 0
0806 2054 0
0807 2055 0
0808 2056 0
0809 2057 0
080A 2058 0
080B 2059 0
080C 2060 0
080D 2061 0
Decimal - Hex Convertion
Decimal
Hex
Enter a hexadecimal number
I/O Ports
Update Port Value
Memory
Update Memory
Line No Assembler Message
0 Program assembled successfully
Decimal to hexa
Simulator: Program running
Type here to search

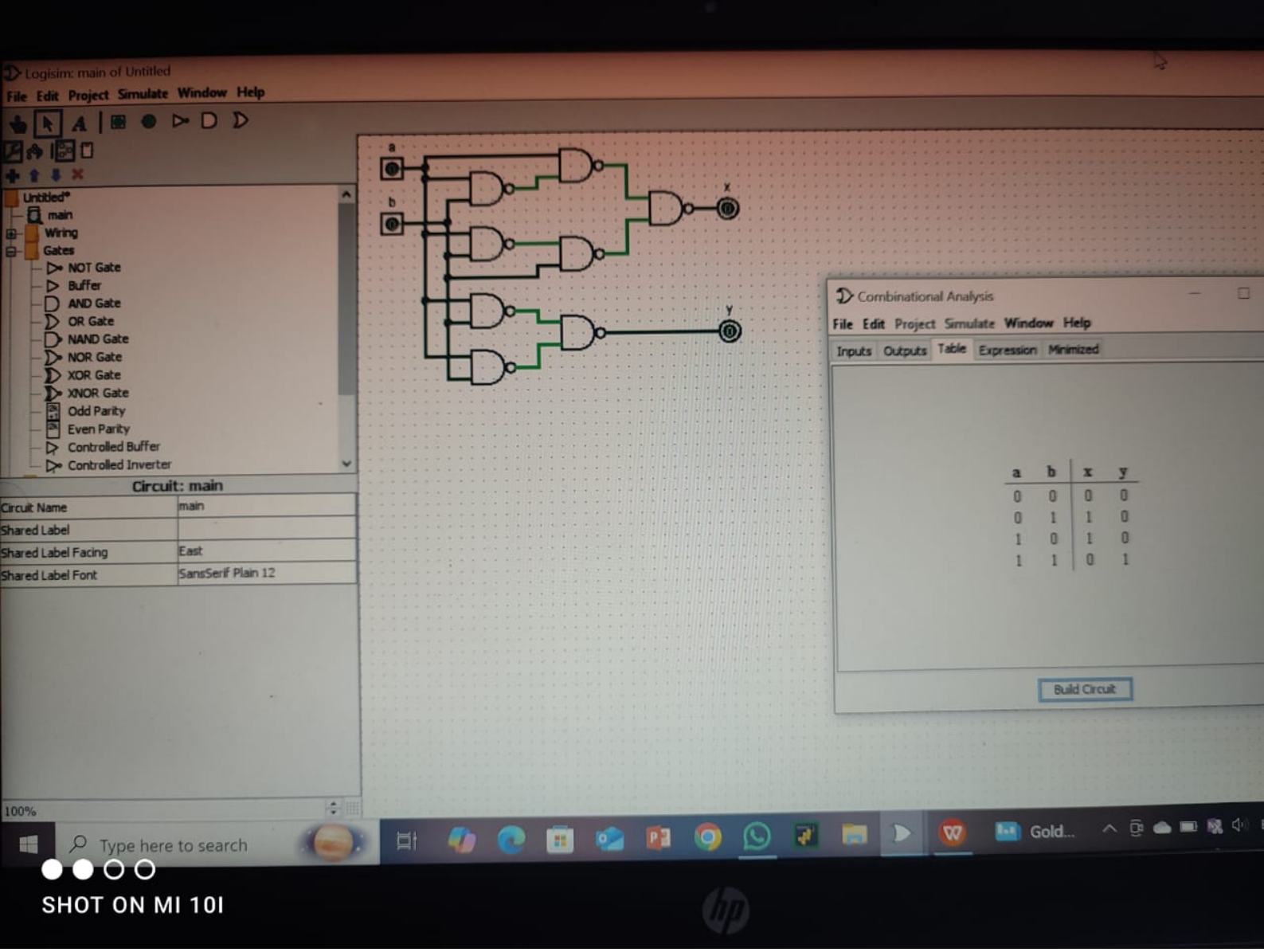

GNUSim8085 - 8085 Microprocessor Simulator
smallest no.
array

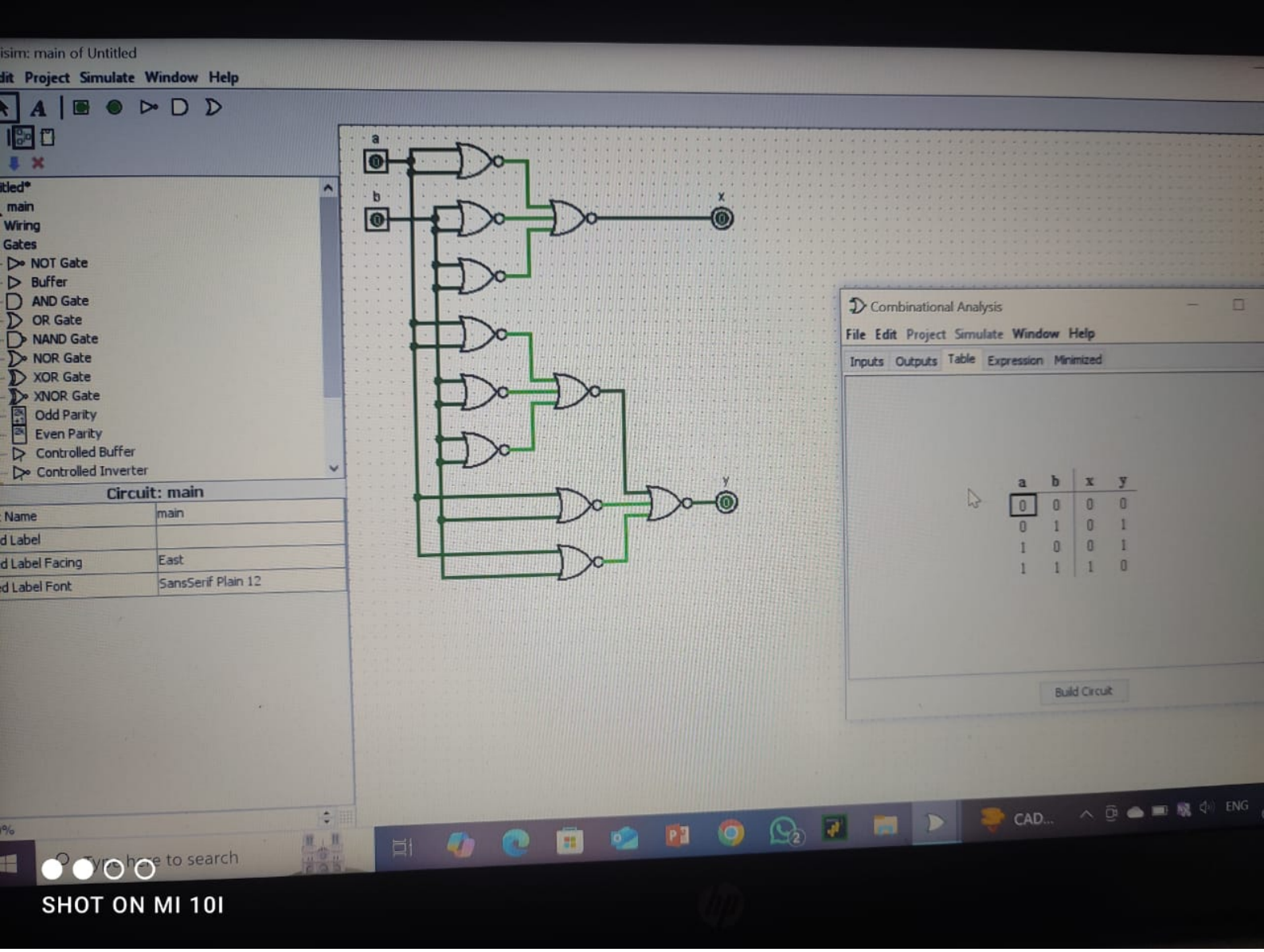

GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
Load me at
Data
Stack
KeyPad
Memory
Start 8050
Address (Hex) Address Data
1F72 8050 4
1F73 8051 251
1F74 8052 0
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Enter new port value and click Update
Memory
Update Memory
Line No Assembler Message
0 Program assembled successfully
one's
complement
Simulator: Idle
Type here to search
25°C
ENG

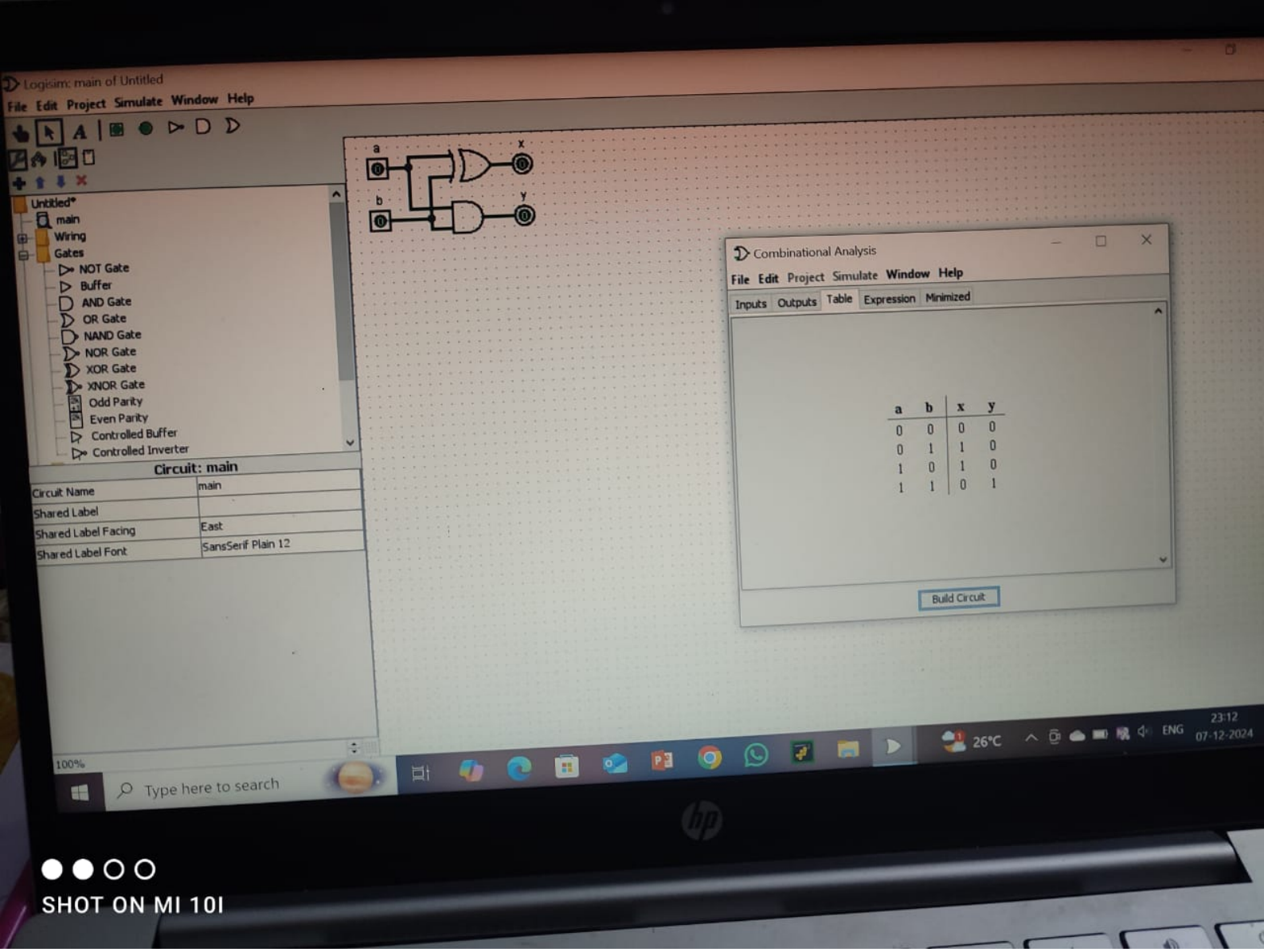

Logisim: main of Untitled 2
File Edit Project Simulate Window Help
Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 1 0
1 0 1 0
1 1 0 1
Build Circuit
Facing West
Output? Yes
Data Bits 1
Three-state? Yes
Pull Behavior Unchanged
Label
Label Location East
Label Font SansSerif Plain 12
2 bit half adder
Type here to search
25°C



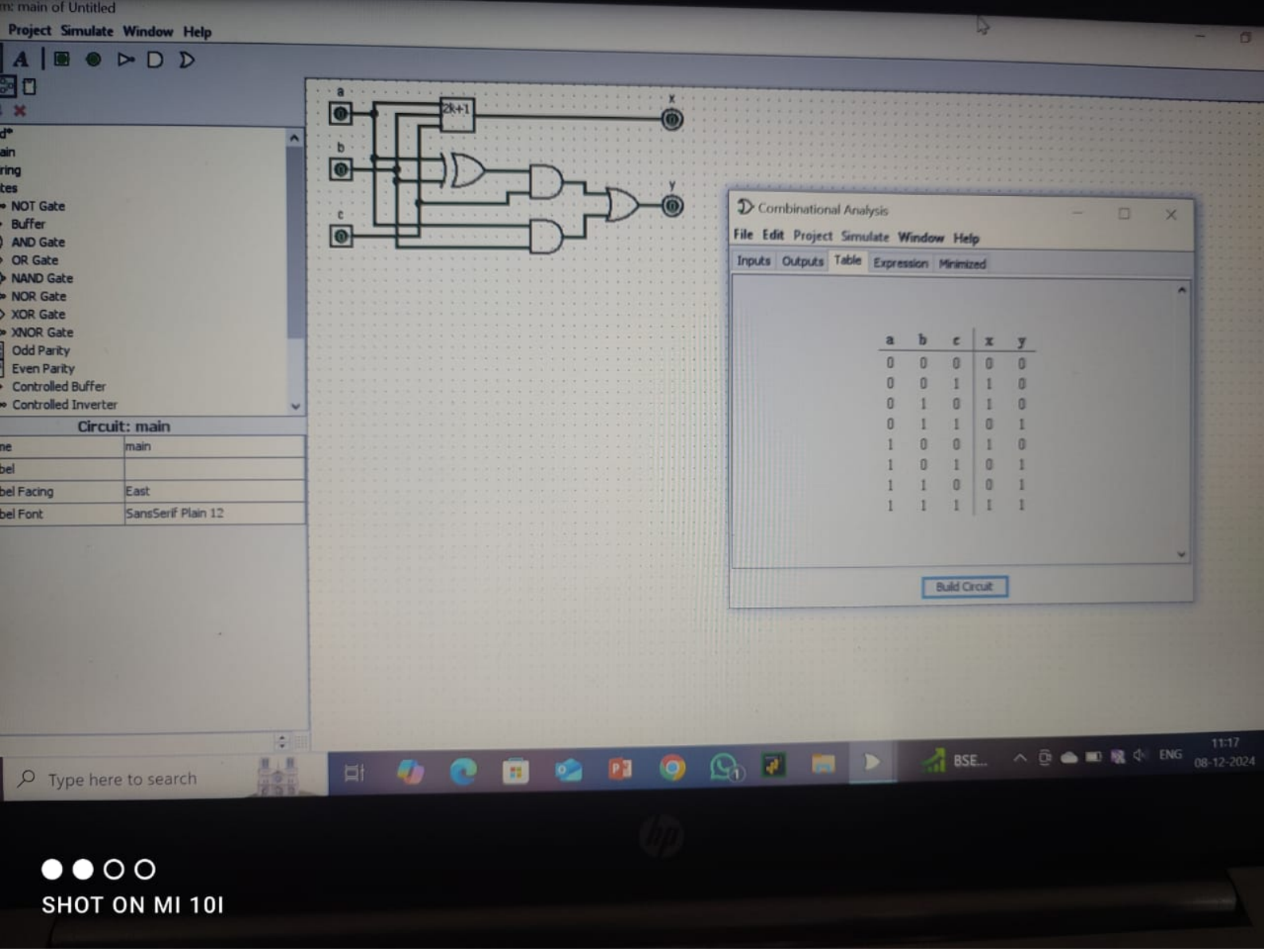
SHOT ON MI 10I

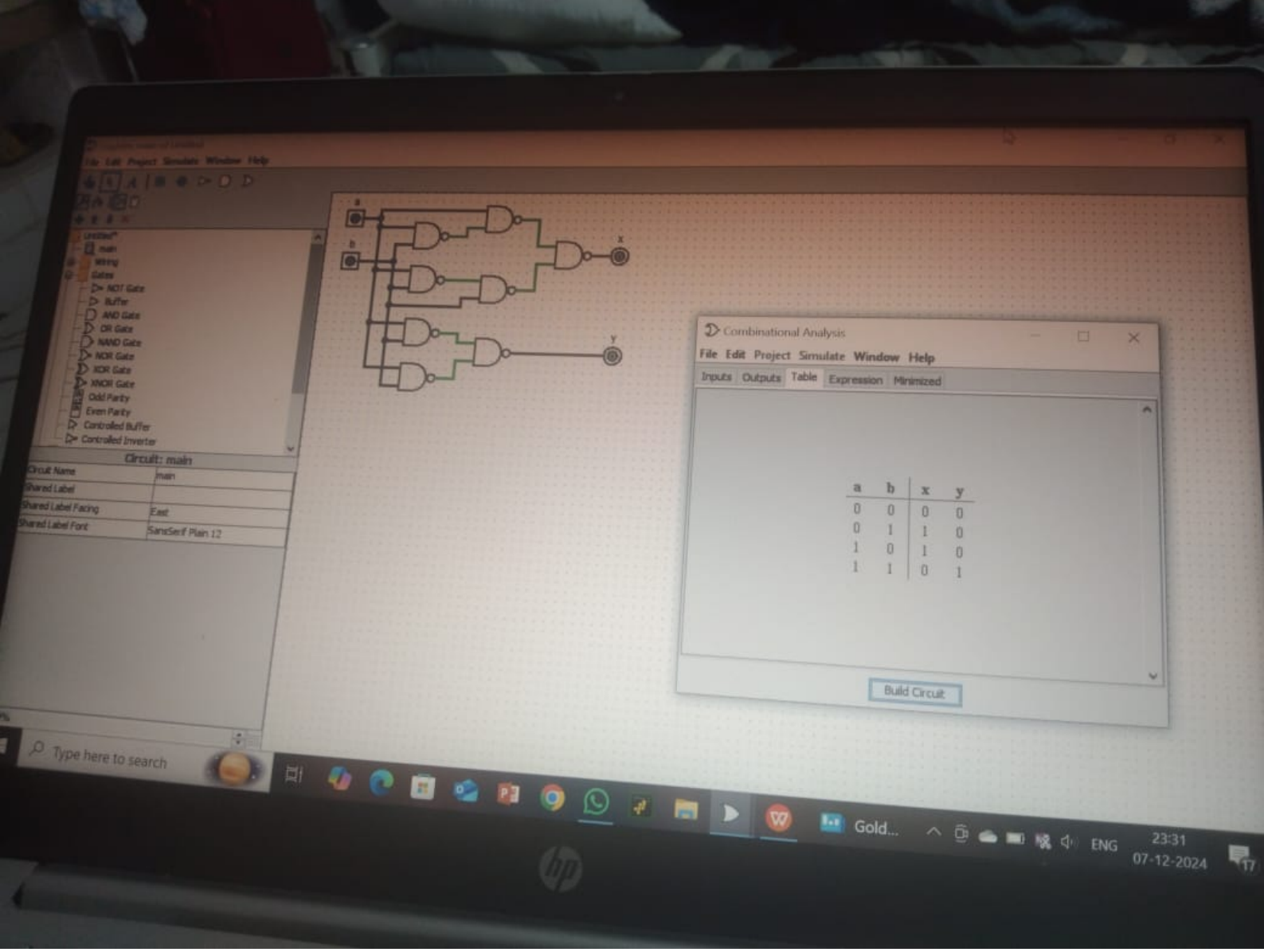


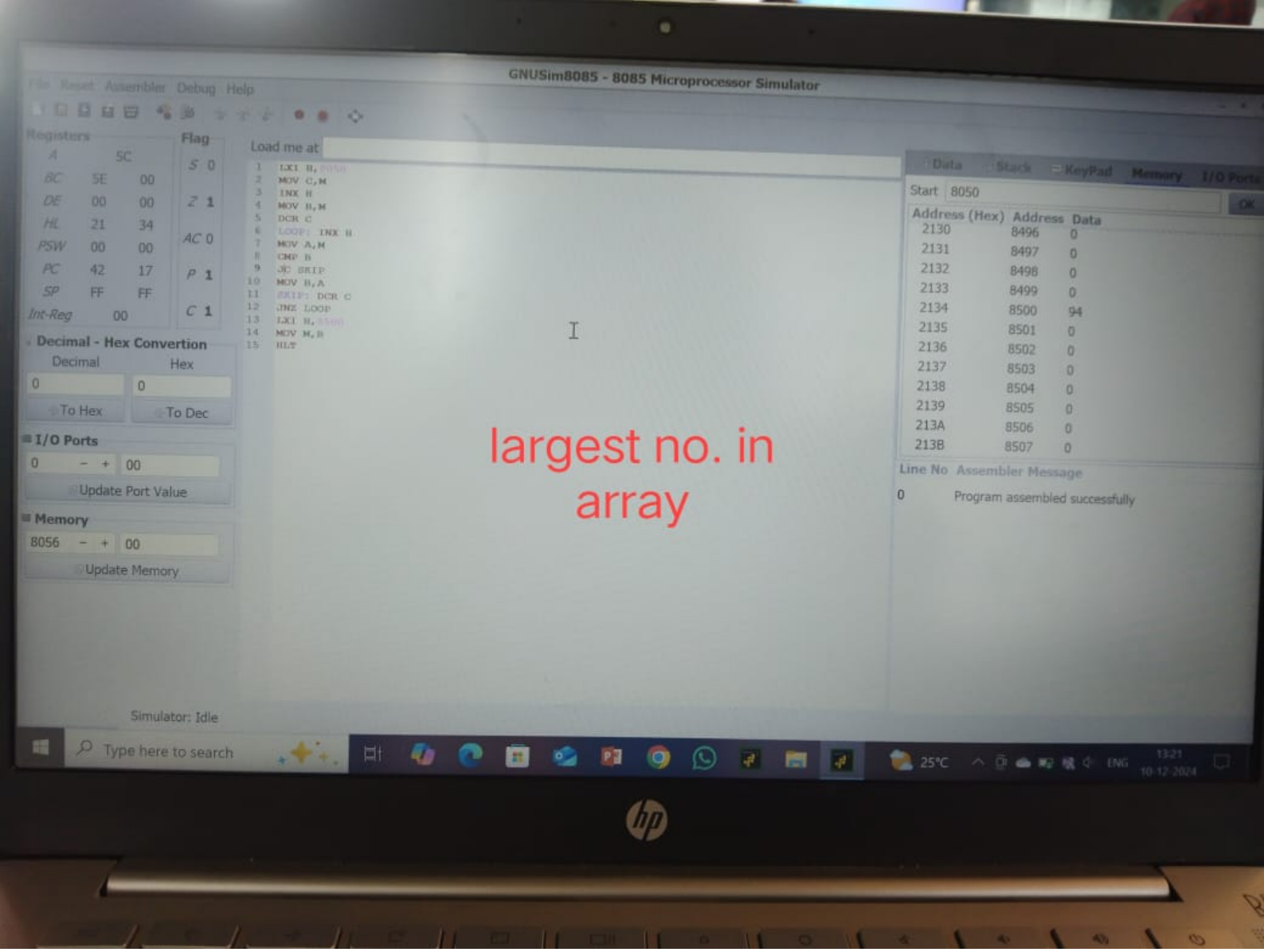

isim: main of Untitled
dit Project Simulate Window Help
itled*
main
Wiring
Gates
NOT Gate
Buffer
AND Gate
OR Gate
NAND Gate
NOR Gate
XOR Gate
XNOR Gate
Odd Parity
Even Parity
Controlled Buffer
Controlled Inverter
Circuit: main
Name
main
d Label
d Label Facing
East
d Label Font
SansSerif Plain 12
a
b
x
y
Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 0 1
1 0 0 1
1 1 1 0
Build Circuit
Type here to search
CAD...
ENG
SHOT ON MI 10I

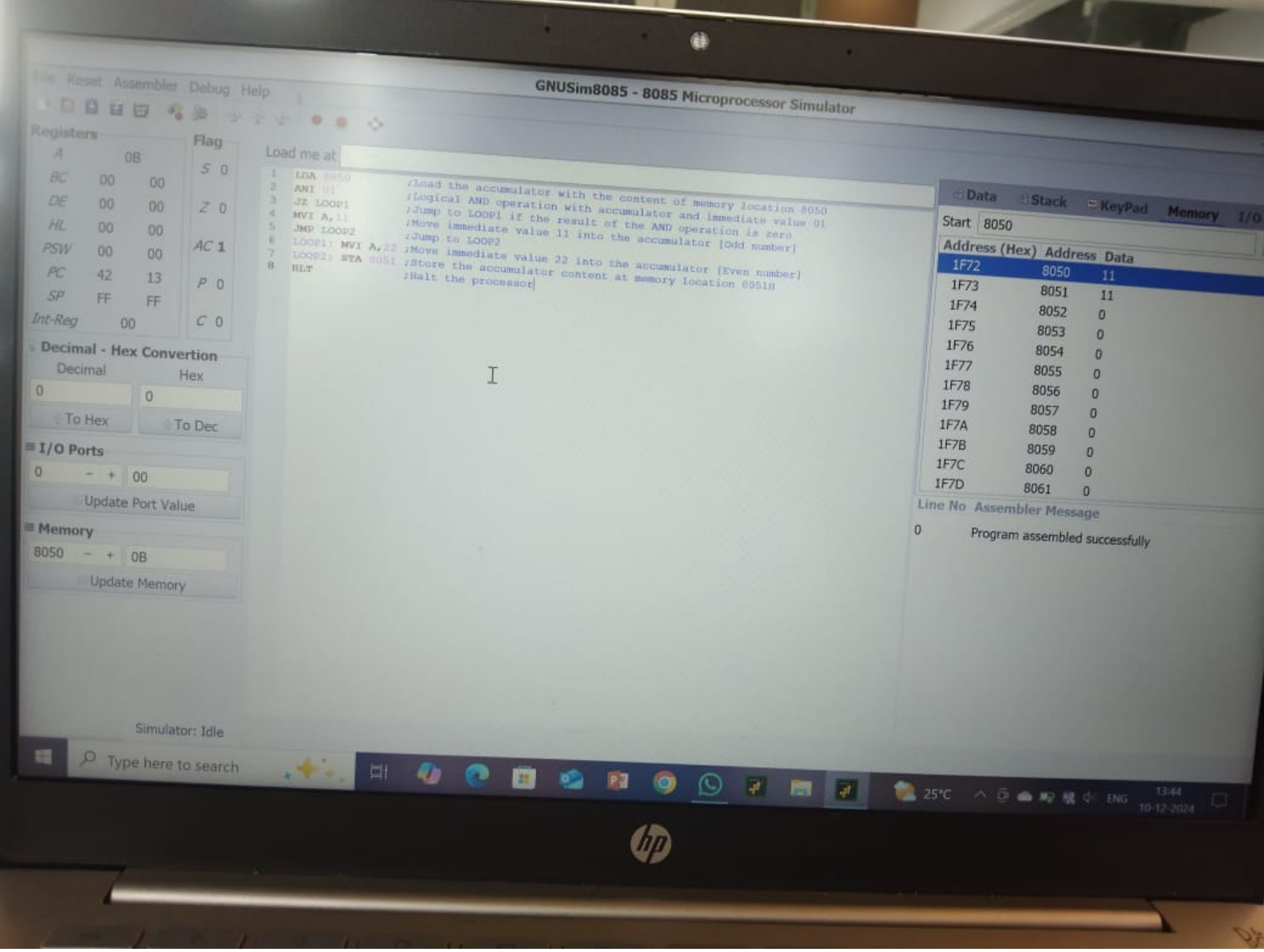


SHOT ON MI 10I




Combinational Analysis
File Edit Project Simulate Window Help
Inputs Outputs Table Expression Minimized
a b x y
0 0 0 0
0 1 1 0
1 0 1 0
1 1 0 1
Build Circuit
Circuit: main
Circuit Name main
Shared Label
Shared Label Facing East
Shared Label Font SansSerif Plain 12
Type here to search
ENG
23:31
07-12-2024


GNUSim8085 - 8085 Microprocessor Simulator
File Reset Assembler Debug Help
Registers
Flag
A 5C
BC 5E 00
DE 00 00
HL 21 34
PSW 00 00
PC 42 17
SP FF FF
Int-Reg 00
S 0
Z 1
AC 0
P 1
C 1
Decimal - Hex Convertion
Decimal
Hex
0
0
To Hex
To Dec
I/O Ports
0 - + 00
Update Port Value
Memory
8056 - + 00
Update Memory
Load me at
1 LXI H,8496
2 MOV C,M
3 INX H
4 MOV B,M
5 DCR C
6 LOOP: INX H
7 MOV A,M
8 CMP B
9 JC SKIP
10 MOV B,A
11 SKIP: DCR C
12 JNZ LOOP
13 LXI H,8500
14 MOV M,B
15 HLT
largest no. in array
Data
Stack
KeyPad
Memory
I/O Ports
Start 8050
OK
Address (Hex) Address Data
2130 8496 0
2131 8497 0
2132 8498 0
2133 8499 0
2134 8500 94
2135 8501 0
2136 8502 0
2137 8503 0
2138 8504 0
2139 8505 0
213A 8506 0
213B 8507 0
Line No Assembler Message
0 Program assembled successfully
Simulator: Idle
Type here to search
25°C
ENG
13:21
10-12-2024


File Reset Assembler Debug Help
GNUSim8085 - 8085 Microprocessor Simulator
Registers
A 0B
BC 00 00
DE 00 00
HL 00 00
PSW 00 00
PC 42 13
SP FF FF
Int-Reg 00
Flag
S 0
Z 0
AC 1
P 0
C 0
Decimal - Hex Convertion
Decimal
Hex
To Hex
To Dec
I/O Ports
Update Port Value
Memory
8050 0B
Update Memory
Load me at
1 LDA 8050 ;Load the accumulator with the content of memory location 8050
2 ANI 01 ;Logical AND operation with accumulator and immediate value 01
3 JZ LOOP1 ;Jump to LOOP1 if the result of the AND operation is zero
4 MVI A,11 ;Move immediate value 11 into the accumulator [Odd number]
5 JMP LOOP2 ;Jump to LOOP2
6 LOOP1: MVI A,22 ;Move immediate value 22 into the accumulator [Even number]
7 LOOP2: STA 8051 ;Store the accumulator content at memory location 8051H
8 HLT ;Halt the processor
Data
Stack
KeyPad
Memory
I/O
Start 8050
Address (Hex) Address Data
1F72 8050 11
1F73 8051 11
1F74 8052 0
1F75 8053 0
1F76 8054 0
1F77 8055 0
1F78 8056 0
1F79 8057 0
1F7A 8058 0
1F7B 8059 0
1F7C 8060 0
1F7D 8061 0
Line No Assembler Message
0 Program assembled successfully
Simulator: Idle
Type here to search
25°C
ENG
13:44
10-12-2024