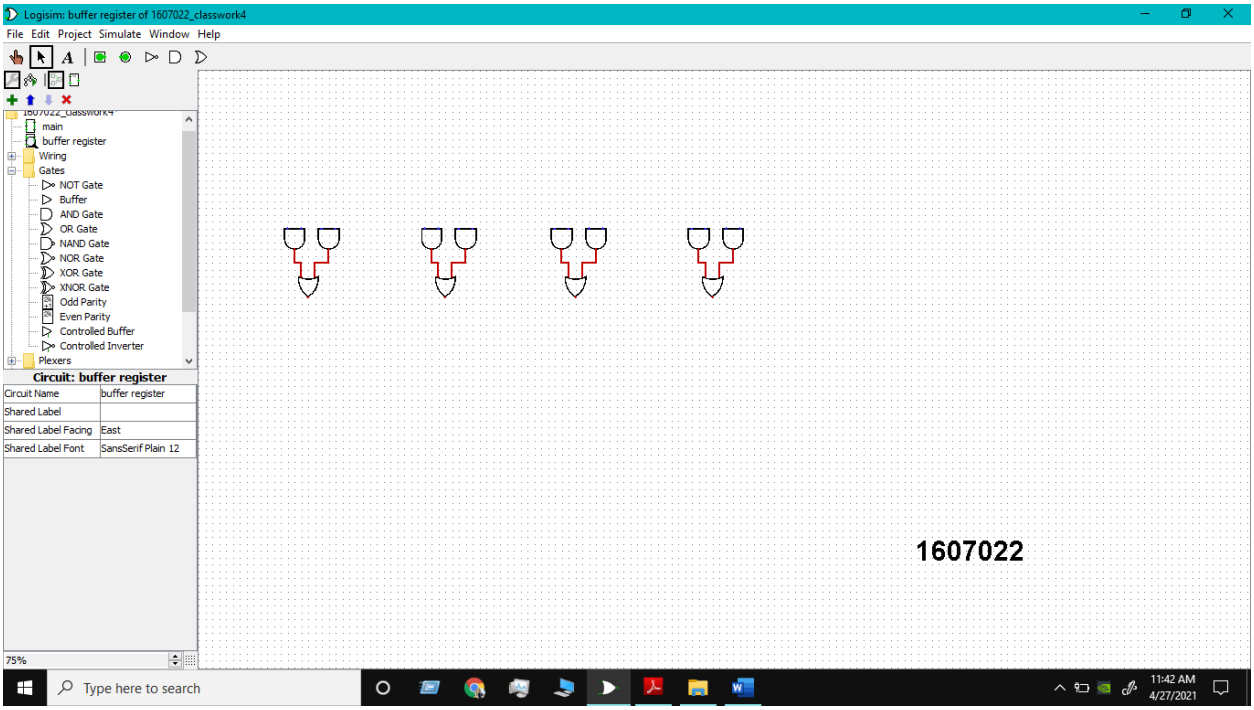
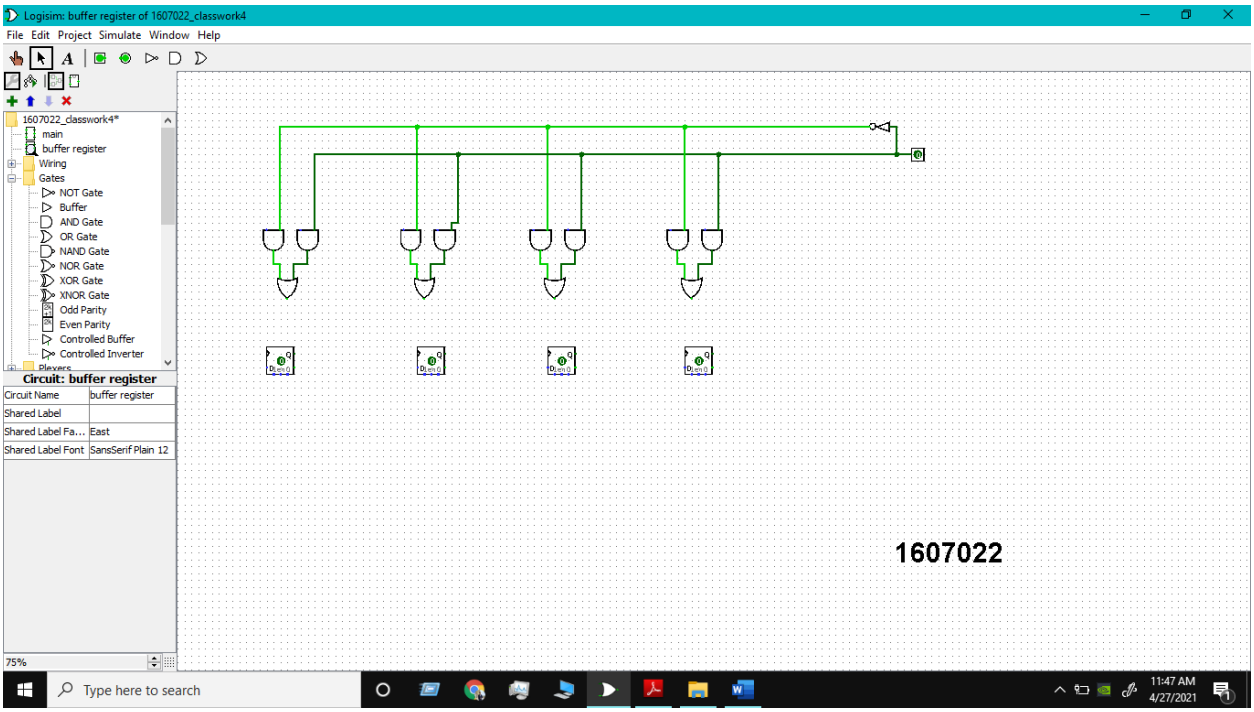
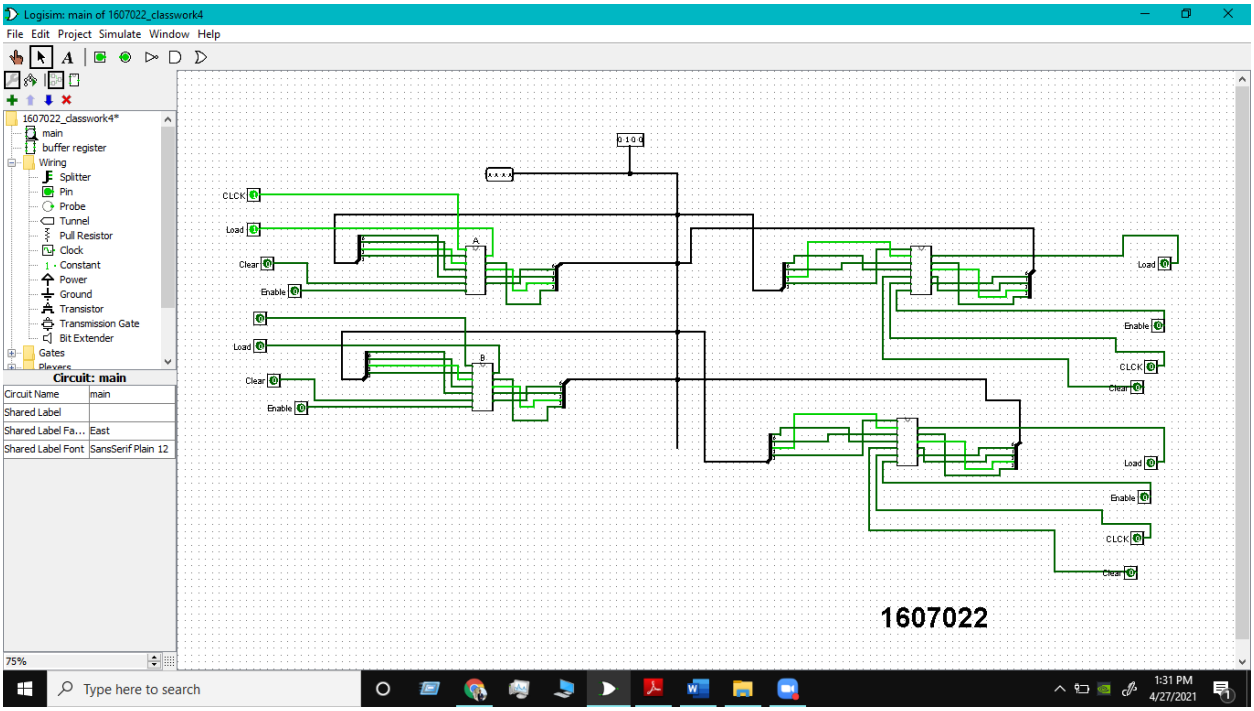
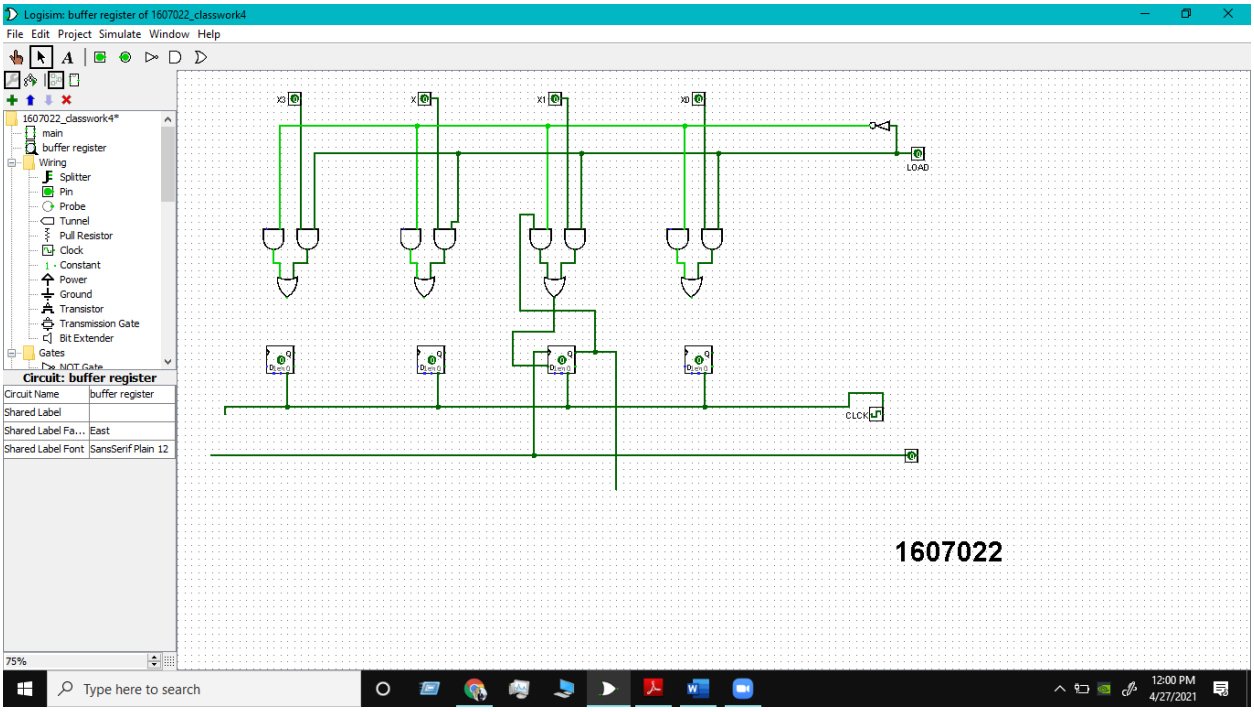
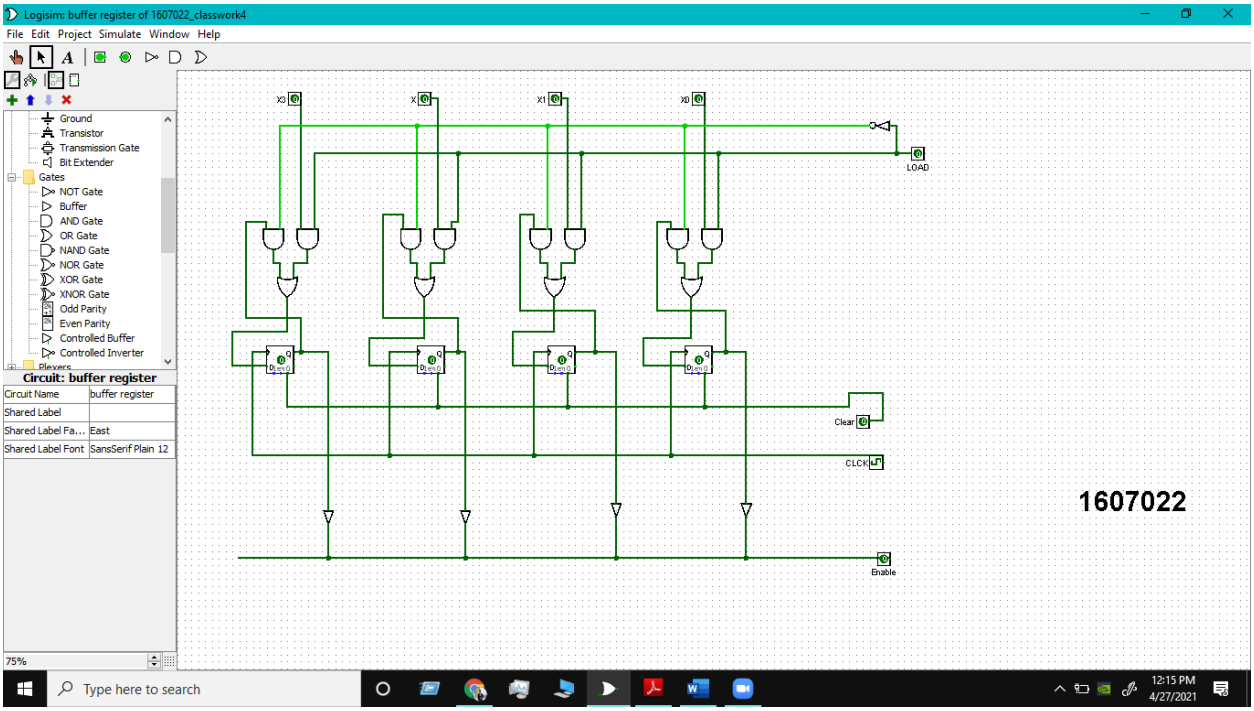
Screen Shots:

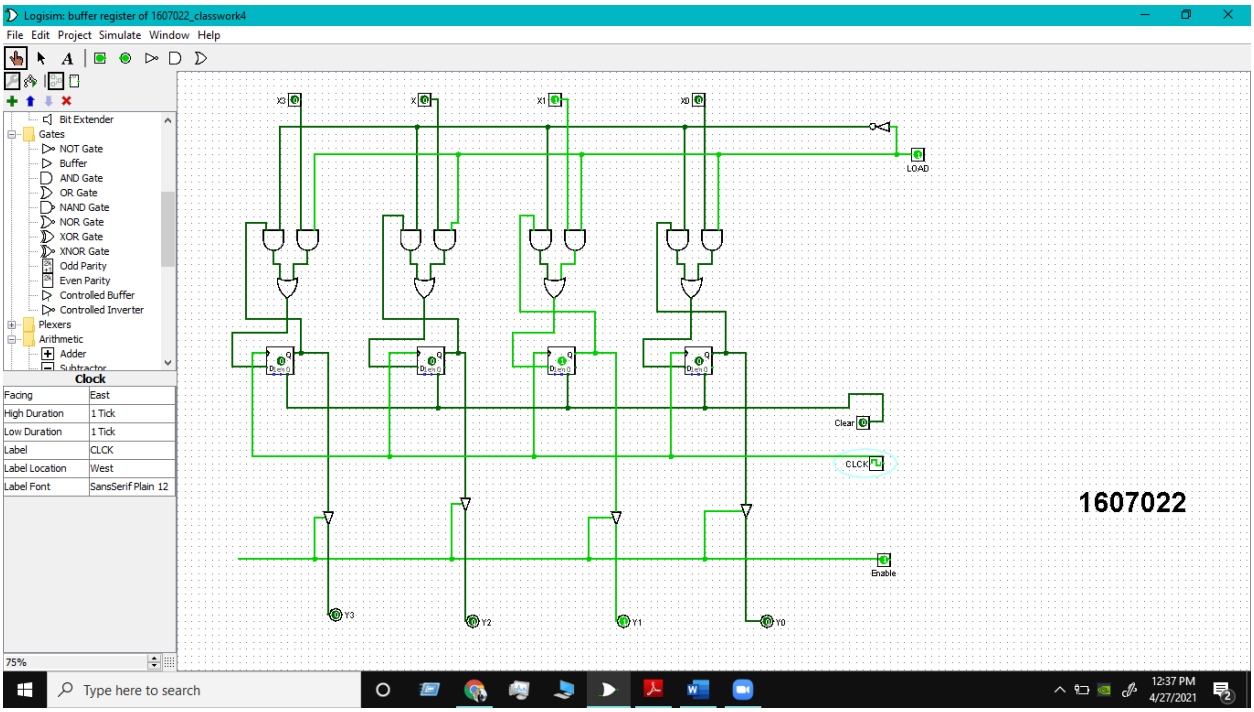


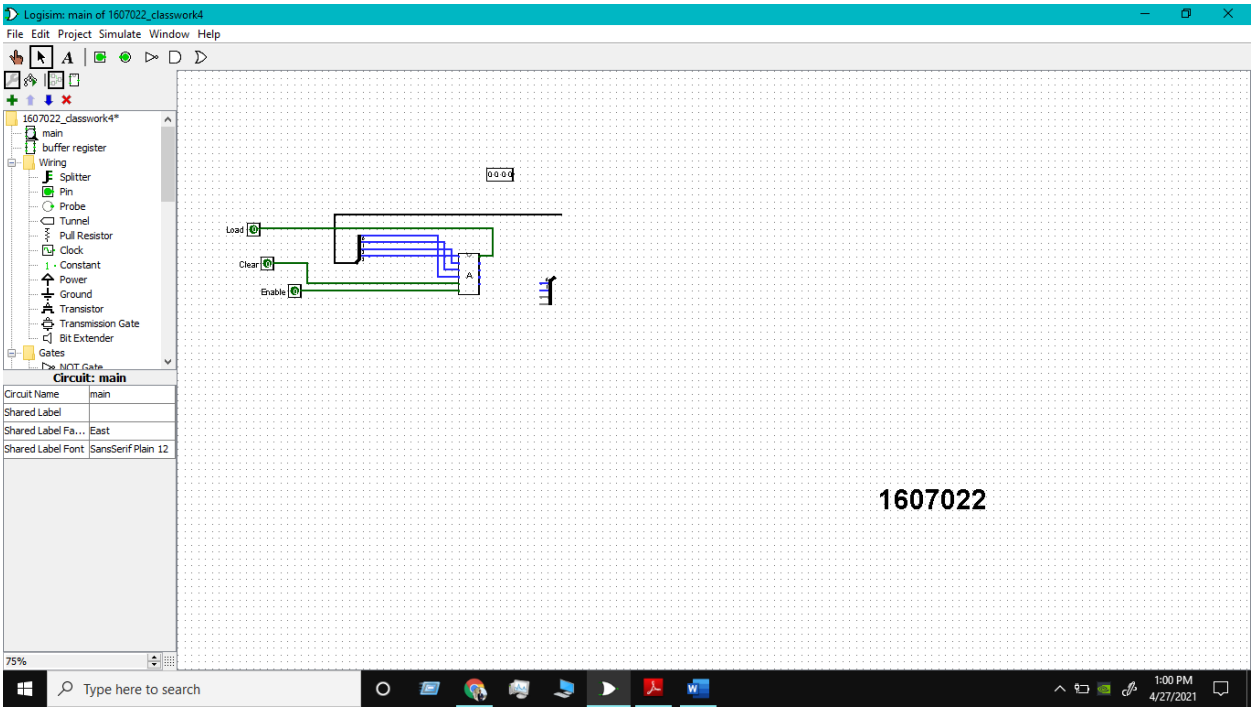


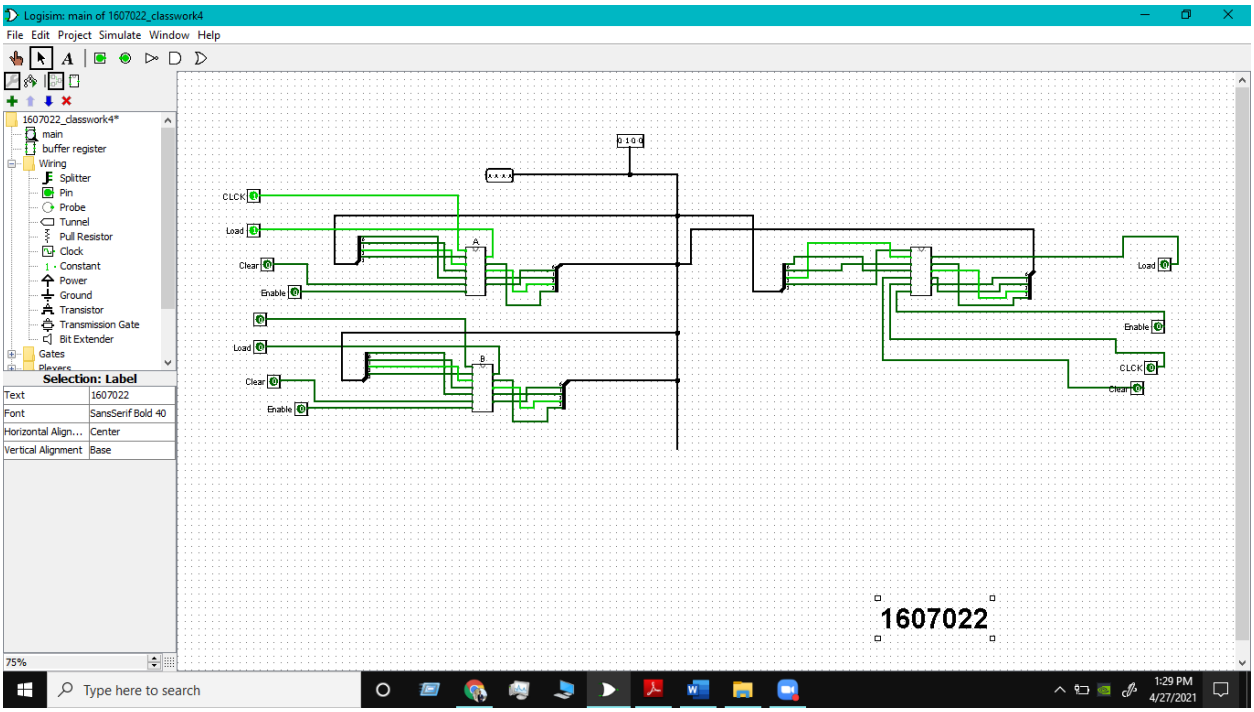

Logisim: main of 1607022_classwork4
File Edit Project Simulate Window Help
1607022_classwork4*
main
buffer register
Wiring
Splitter
Pin
Probe
Tunnel
Pull Resistor
Clock
Constant
Power
Ground
Transistor
Transmission Gate
Bit Extender
Gates
Circuit: main
Circuit Name main
Shared Label
Shared Label Fa... East
Shared Label Font SansSerif Plain 12
CLCK
Load
Clear
Enable
A
B
1607022
75%
Type here to search
1:31 PM
4/27/2021


Logisim: buffer register of 1607022_classwork4
File Edit Project Simulate Window Help
1607022_classwork4*
main
buffer register
Wiring
Splitter
Pin
Probe
Tunnel
Pull Resistor
Clock
Constant
Power
Ground
Transistor
Transmission Gate
Bit Extender
Gates
Circuit: buffer register
Circuit Name buffer register
Shared Label
Shared Label Fa... East
Shared Label Font SansSerif Plain 12
X3
X
X1
X0
LOAD
CLCK
1607022
75%
Type here to search
12:00 PM
4/27/2021


Logisim: buffer register of 1607022_classwork4
File Edit Project Simulate Window Help
Ground
Transistor
Transmission Gate
Bit Extender
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: buffer register
Circuit Name buffer register
Shared Label
Shared Label Fa... East
Shared Label Font SansSerif Plain 12
X3
X2
X1
X0
LOAD
Clear
CLCK
Enable
1607022
75%
Type here to search
12:15 PM
4/27/2021


Logisim: buffer register of 1607022_classwork4
File Edit Project Simulate Window Help
Bit Extender
Gates
NOT Gate
Buffer
AND Gate
OR Gate
NAND Gate
NOR Gate
XOR Gate
XNOR Gate
Odd Parity
Even Parity
Controlled Buffer
Controlled Inverter
Plexers
Arithmetic
Adder
Clock
Facing East
High Duration 1 Tick
Low Duration 1 Tick
Label CLCK
Label Location West
Label Font SansSerif Plain 12
X3
X2
X1
X0
LOAD
Clear
CLCK
Enable
Y3
Y2
Y1
Y0
1607022
75%
Type here to search
12:37 PM
4/27/2021

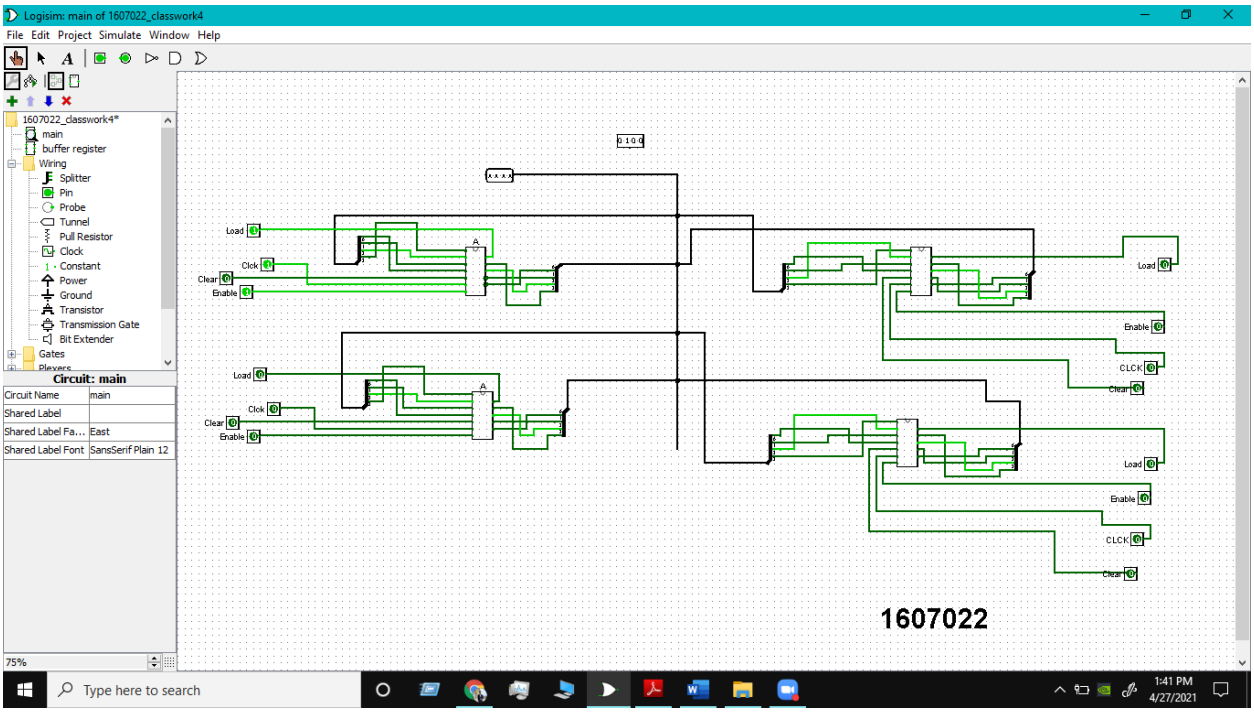

Logisim: main of 1607022_classwork4
File Edit Project Simulate Window Help
1607022_classwork4*
main
buffer register
Wiring
Splitter
Pin
Probe
Tunnel
Pull Resistor
Clock
Constant
Power
Ground
Transistor
Transmission Gate
Bit Extender
Gates
Circuit: main
Circuit Name main
Shared Label
Shared Label Fa... East
Shared Label Font SansSerif Plain 12
0-0-0-0
Load
Clear
Enable
A
1607022
75%
Type here to search
1:00 PM
4/27/2021


Logisim: main of 1607022_classwork4
File Edit Project Simulate Window Help
1607022_classwork4*
main
buffer register
Wiring
Splitter
Pin
Probe
Tunnel
Pull Resistor
Clock
Constant
Power
Ground
Transistor
Transmission Gate
Bit Extender
Gates
Plexers
Selection: Label
Text 1607022
Font SansSerif Bold 40
Horizontal Align... Center
Vertical Alignment Base
0-1-0-0
CLCK
Load
Clear
Enable
A
B
1607022
75%
Type here to search
1:29 PM
4/27/2021

Demo result:

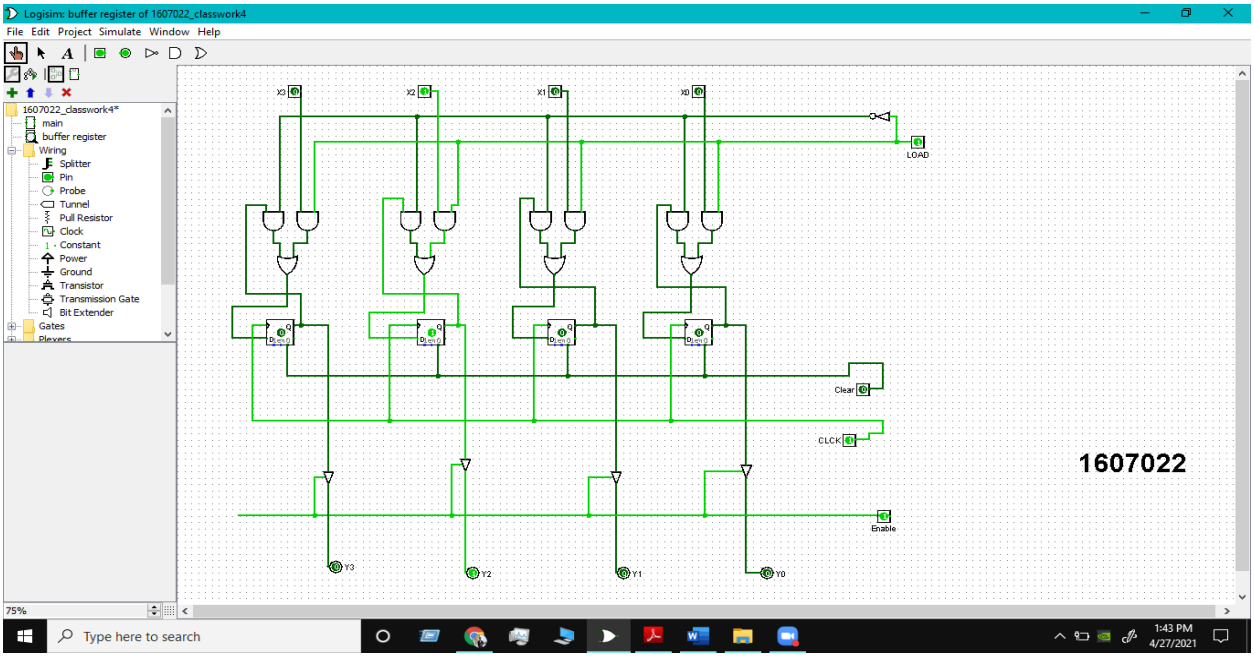
My roll is 1607022. So, I take 01 (decimal=2) as input.

Load the input in A register:

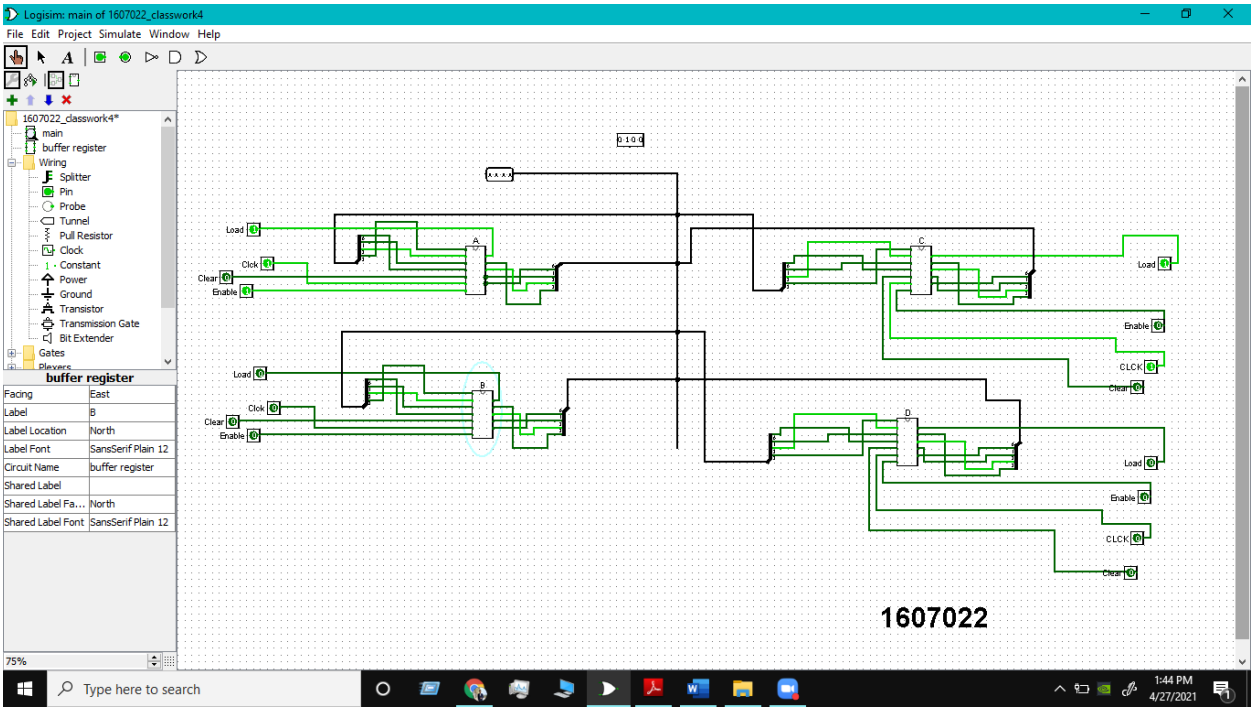


See the load result in A register:

We see 0100 is loaded in A register.

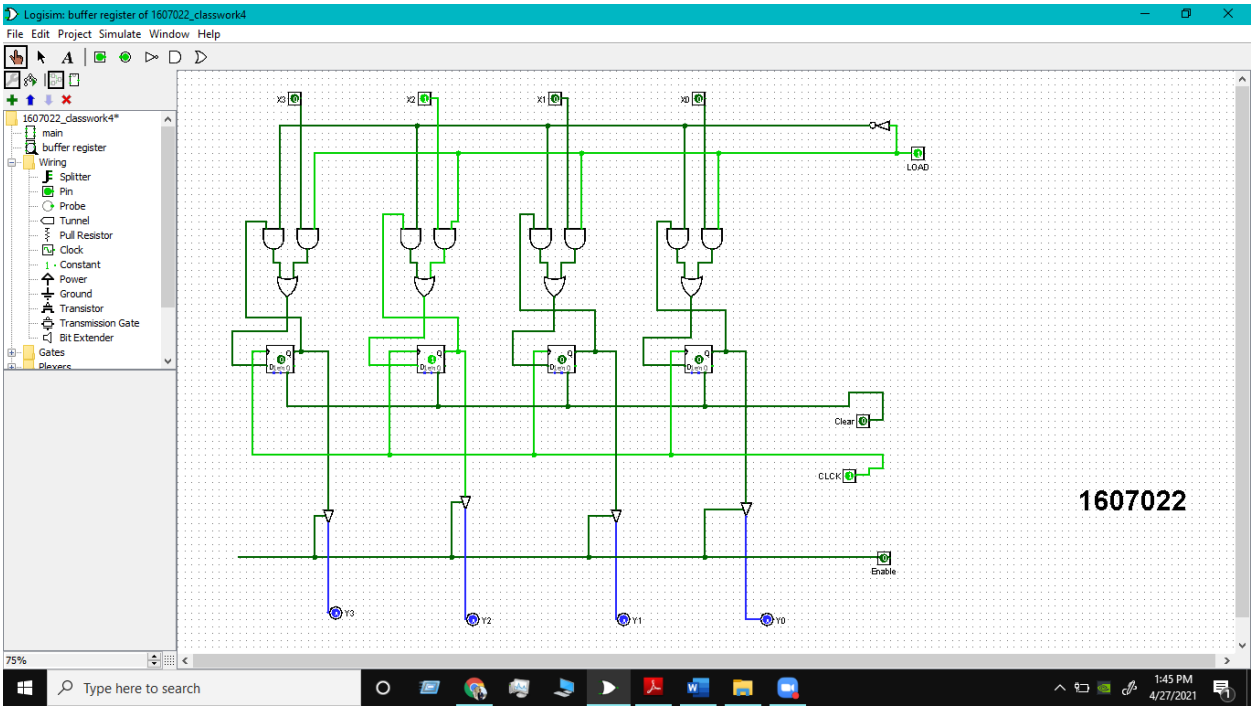


Load in C register:

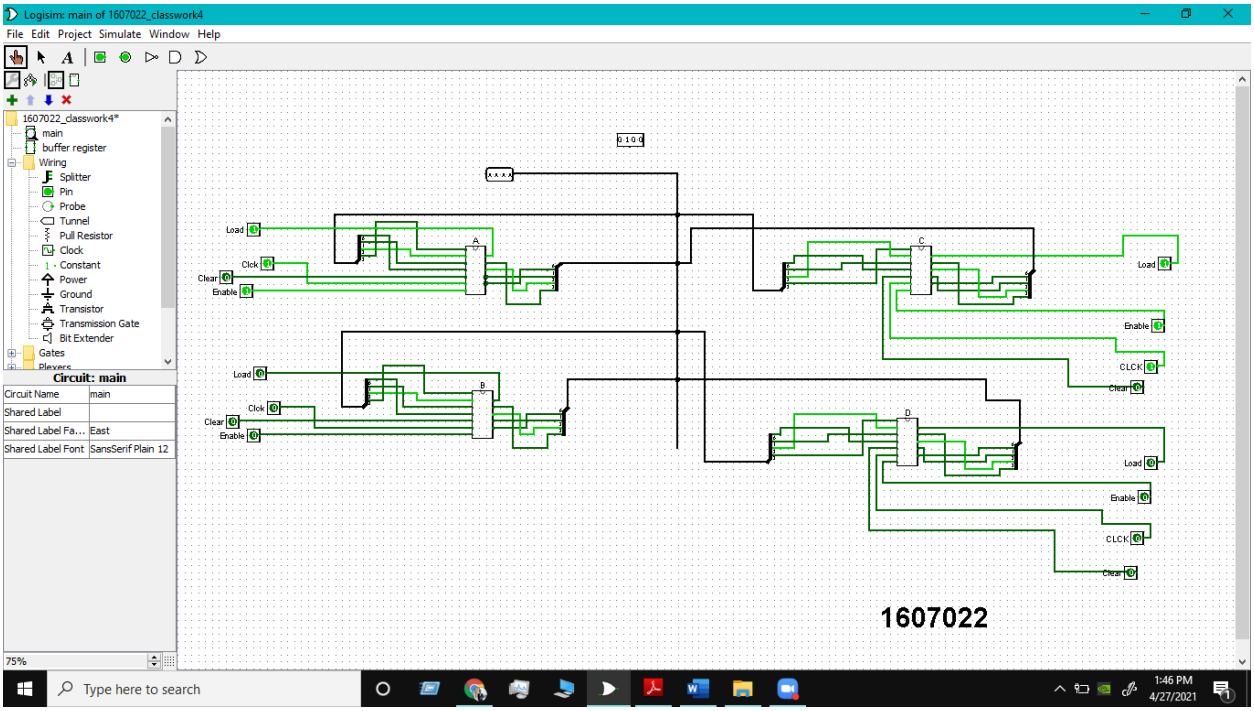


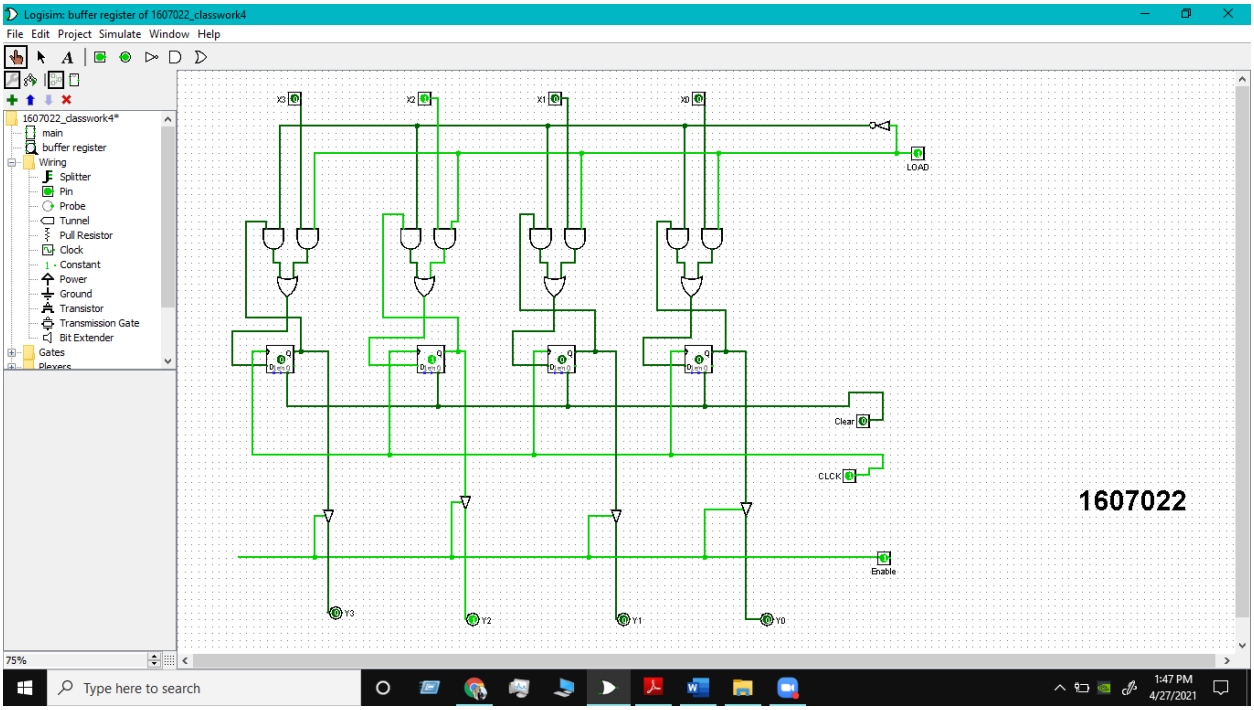
Before loading The C register (before enabling):

There is no input. 0000 is here in C register.



After clinking the enable pin:



After enabling in C register:

we see 0100 load in C register.