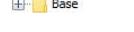
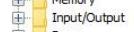
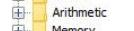
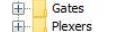
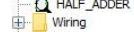
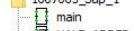


# Logisim: HALF\_ADDER of 1607065\_Sap\_1

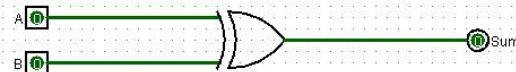
File Edit Project Simulate Window Help



## Circuit: HALF\_ADDER

Circuit Name	HALF_ADDER
Shared Label	HA
Shared Label Facing	North
Shared Label Font	SansSerif Plain 12

## 1607065\_SAP\_1\_HALF\_ADDER

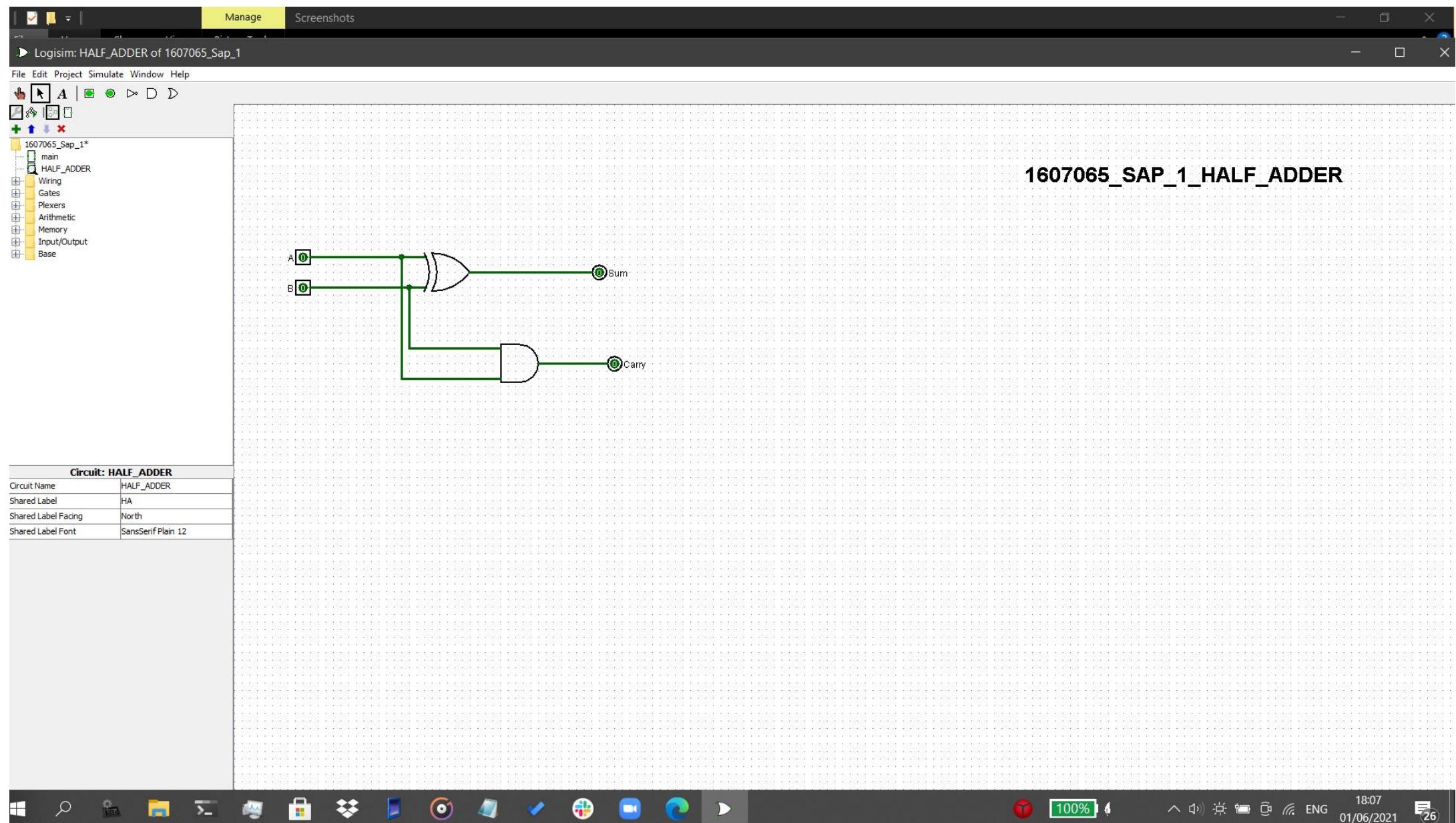


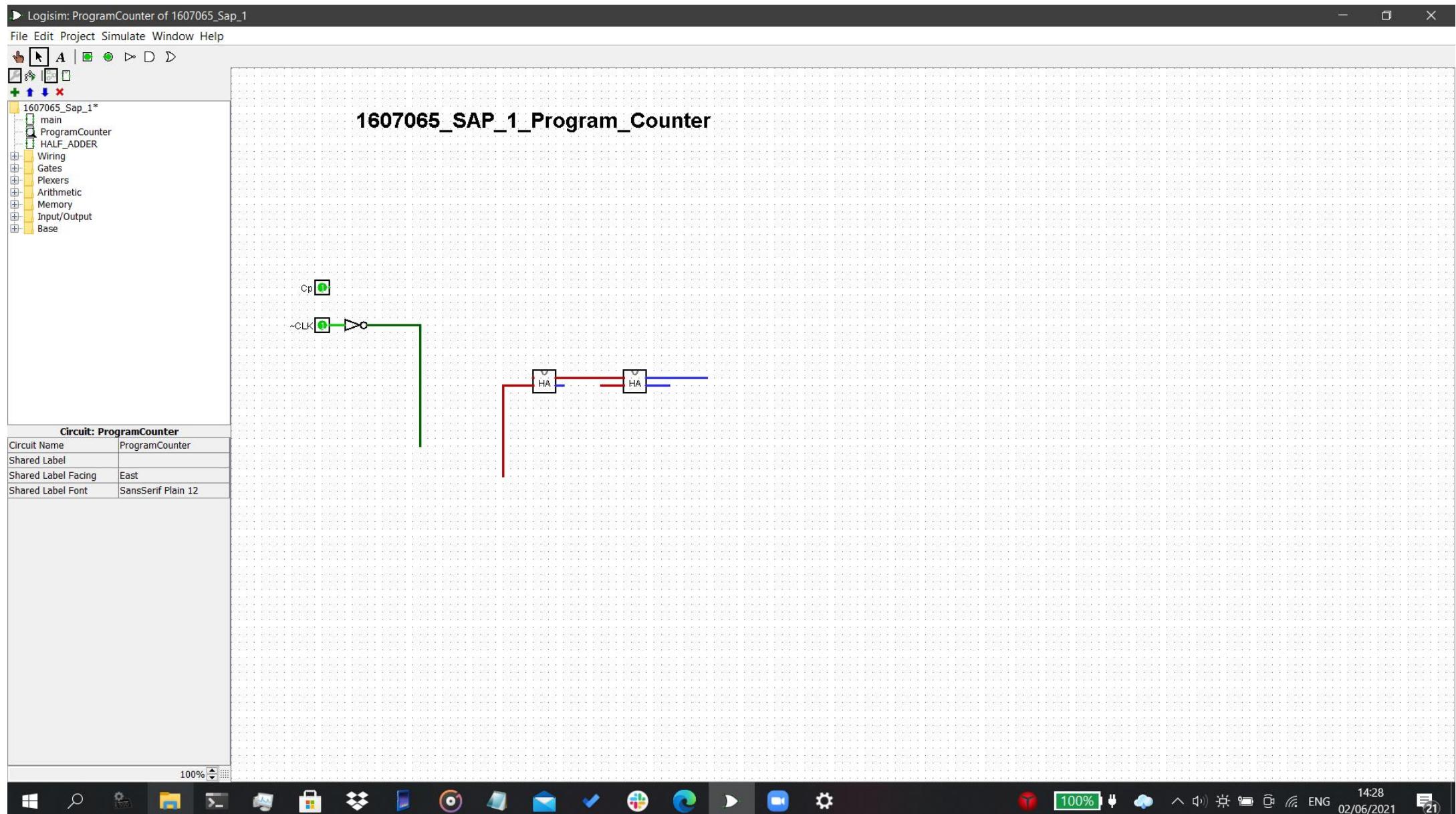
100%



18:01  
01/06/2021







# Logisim: ProgramCounter of 1607065\_Sap\_1

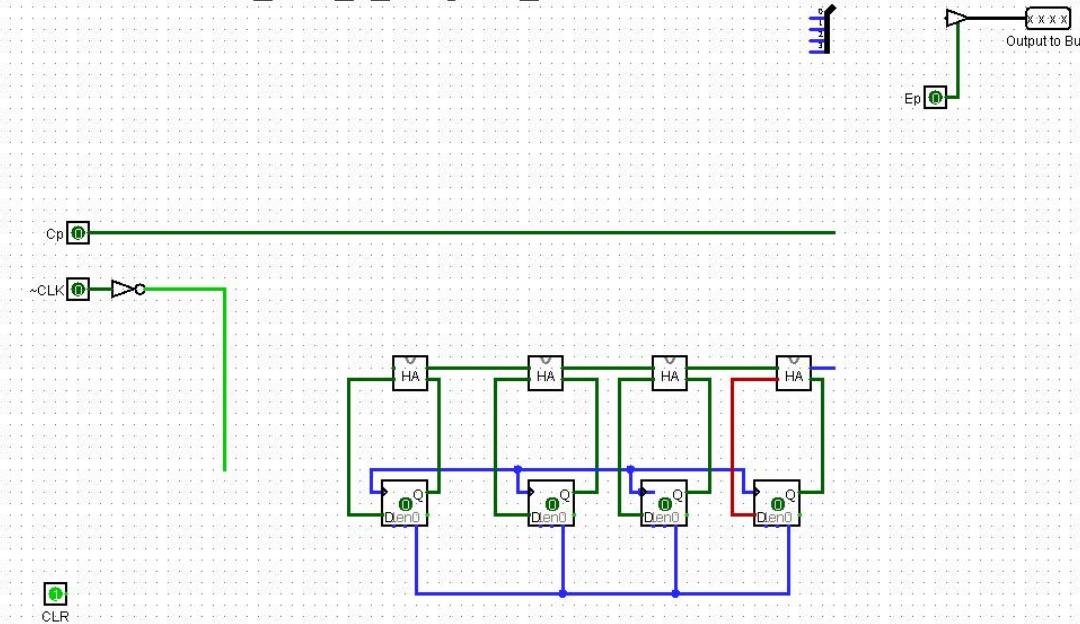
File Edit Project Simulate Window Help



1607065\_Sap\_1\*

- main
- ProgramCounter
- HALF\_ADDER
- Wiring
- Gates
- Plexers
- Arithmetic
- Memory
- Input/Output
- Base

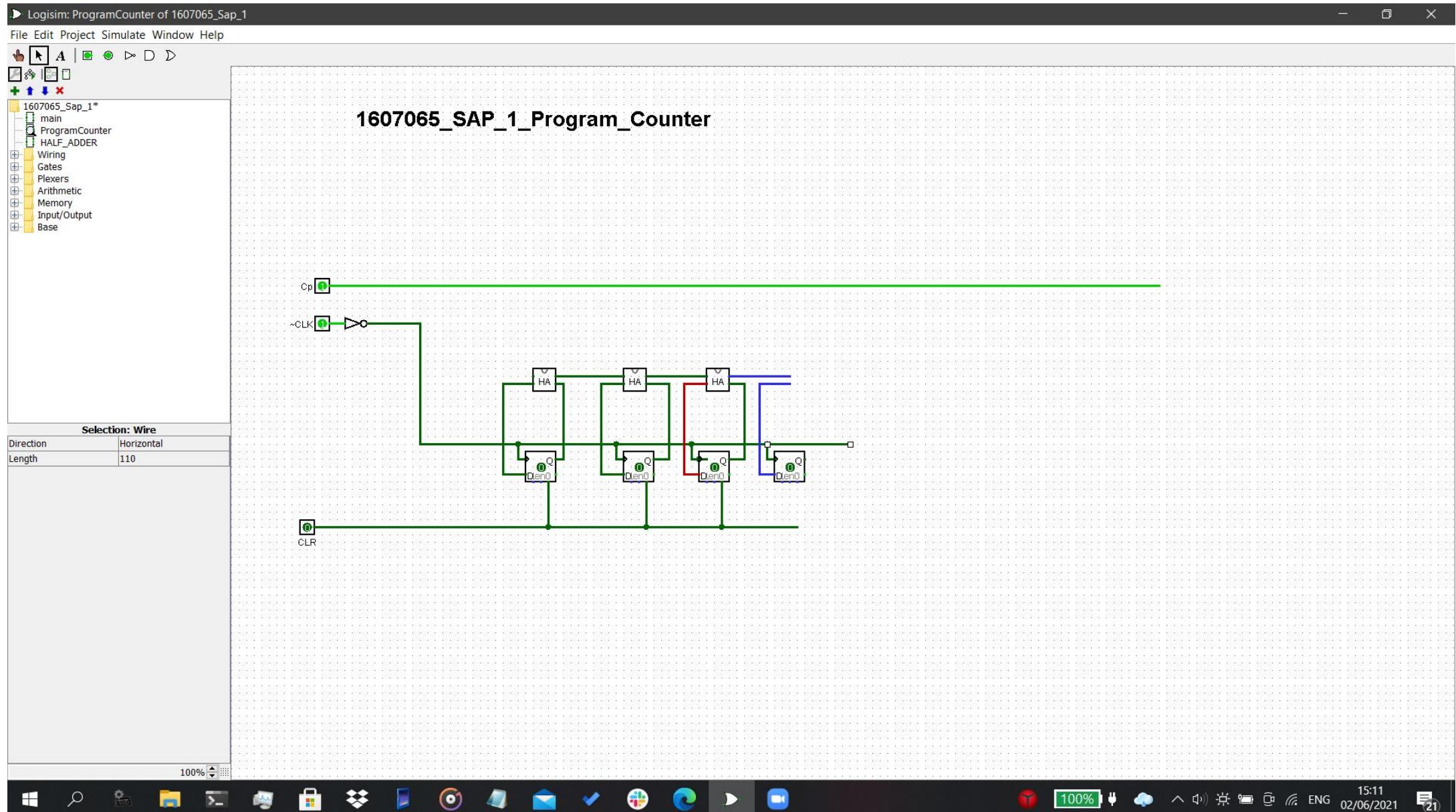
## 1607065\_SAP\_1\_Program\_Counter

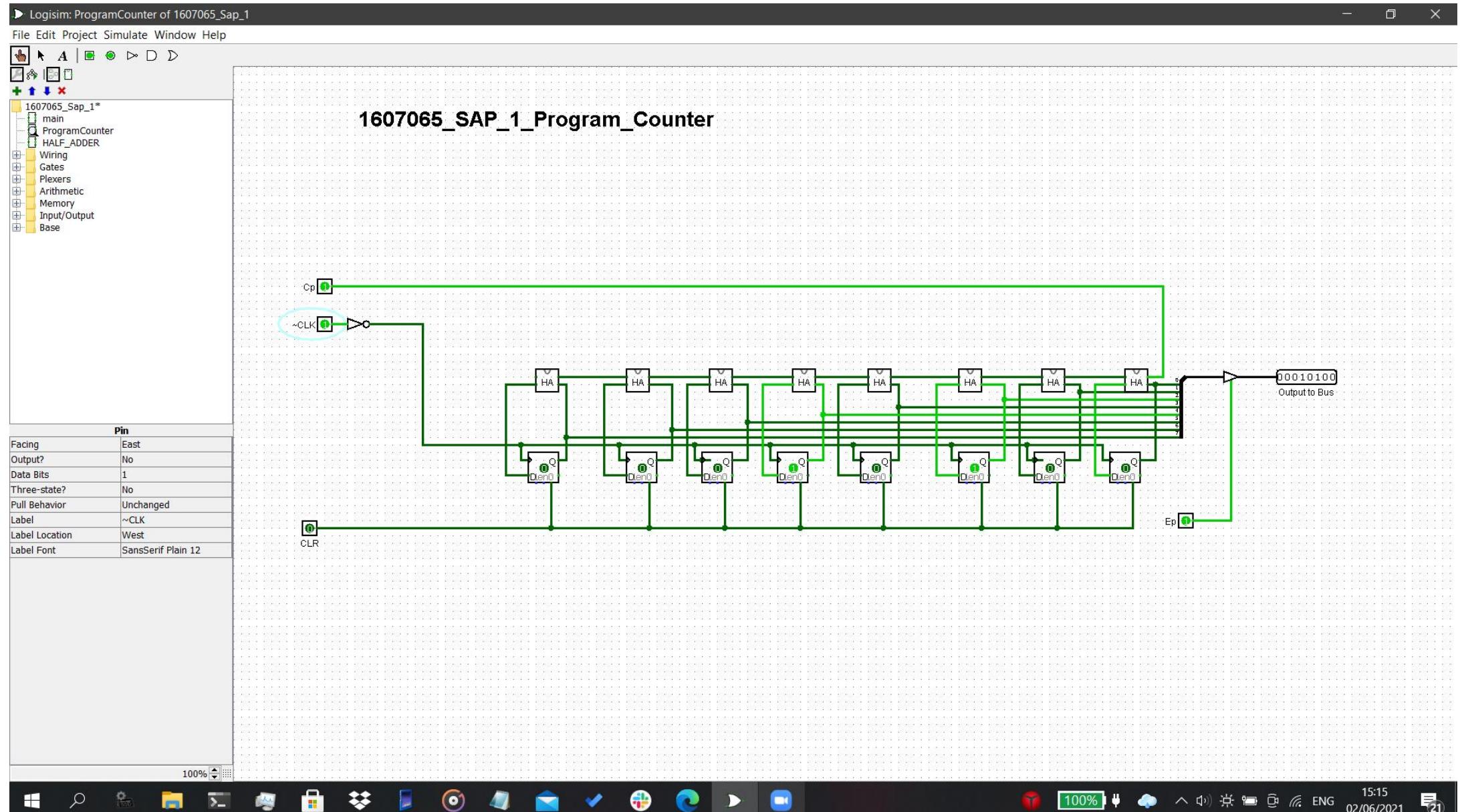


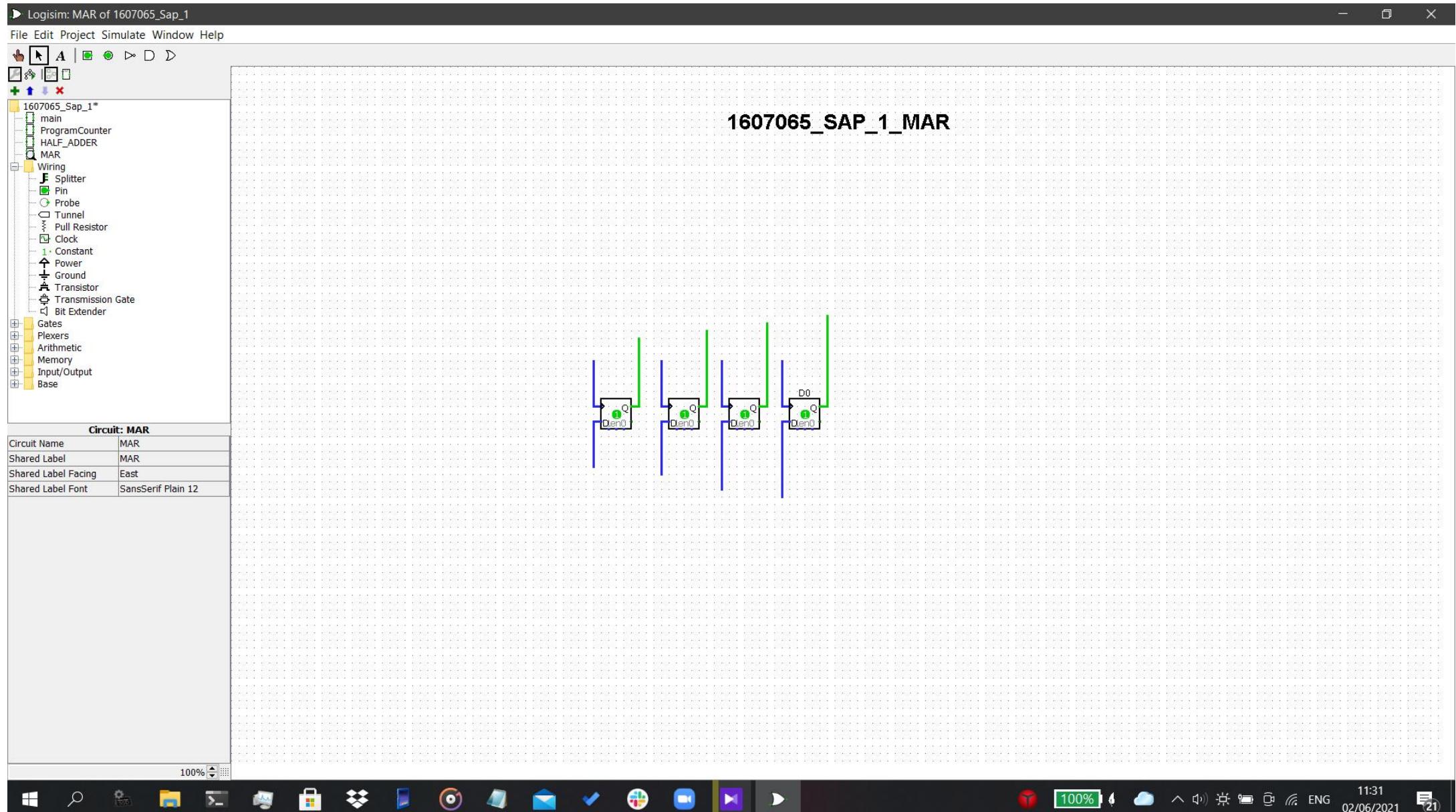
Circuit: ProgramCounter	
Circuit Name	ProgramCounter
Shared Label	
Shared Label Facing	East
Shared Label Font	SansSerif Plain 12

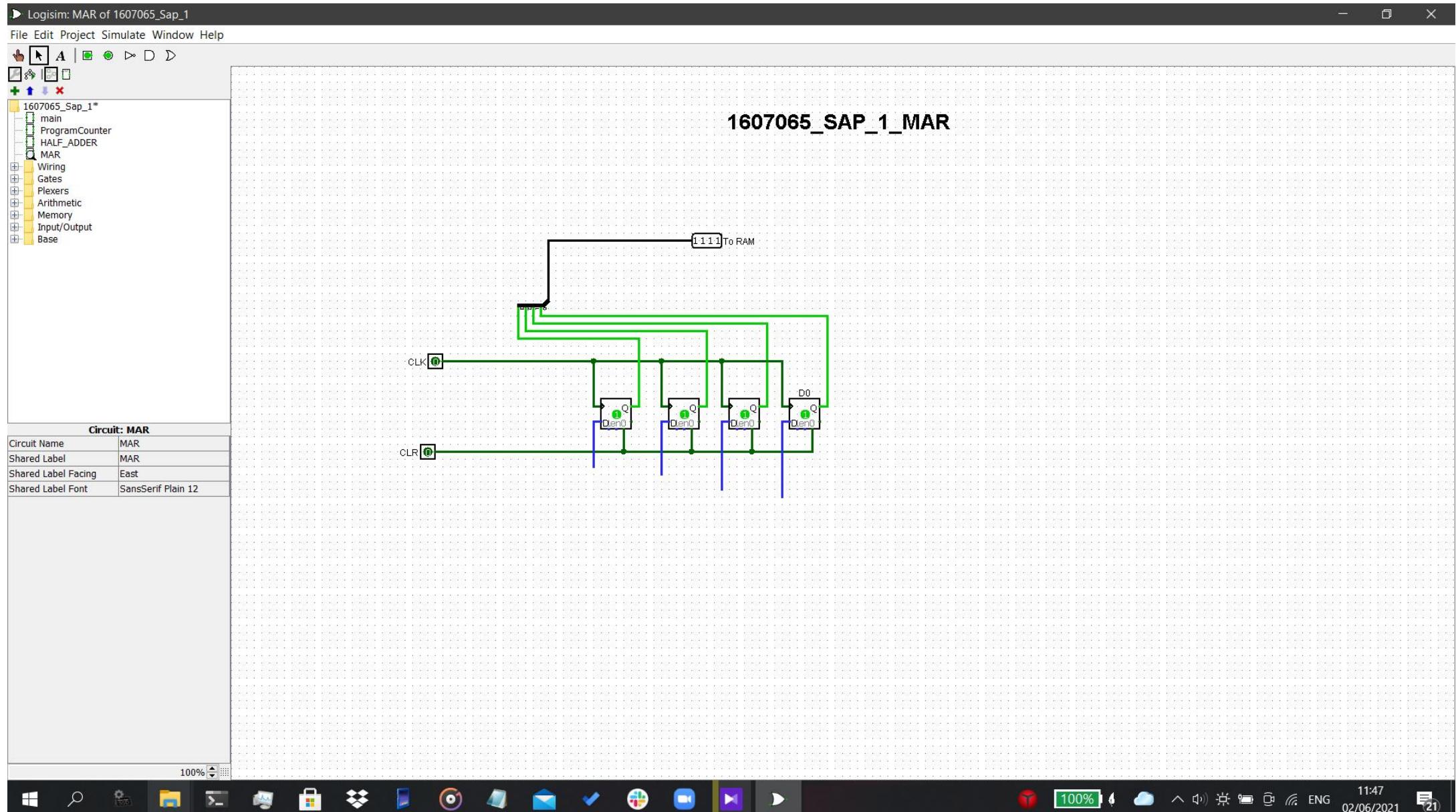
100%

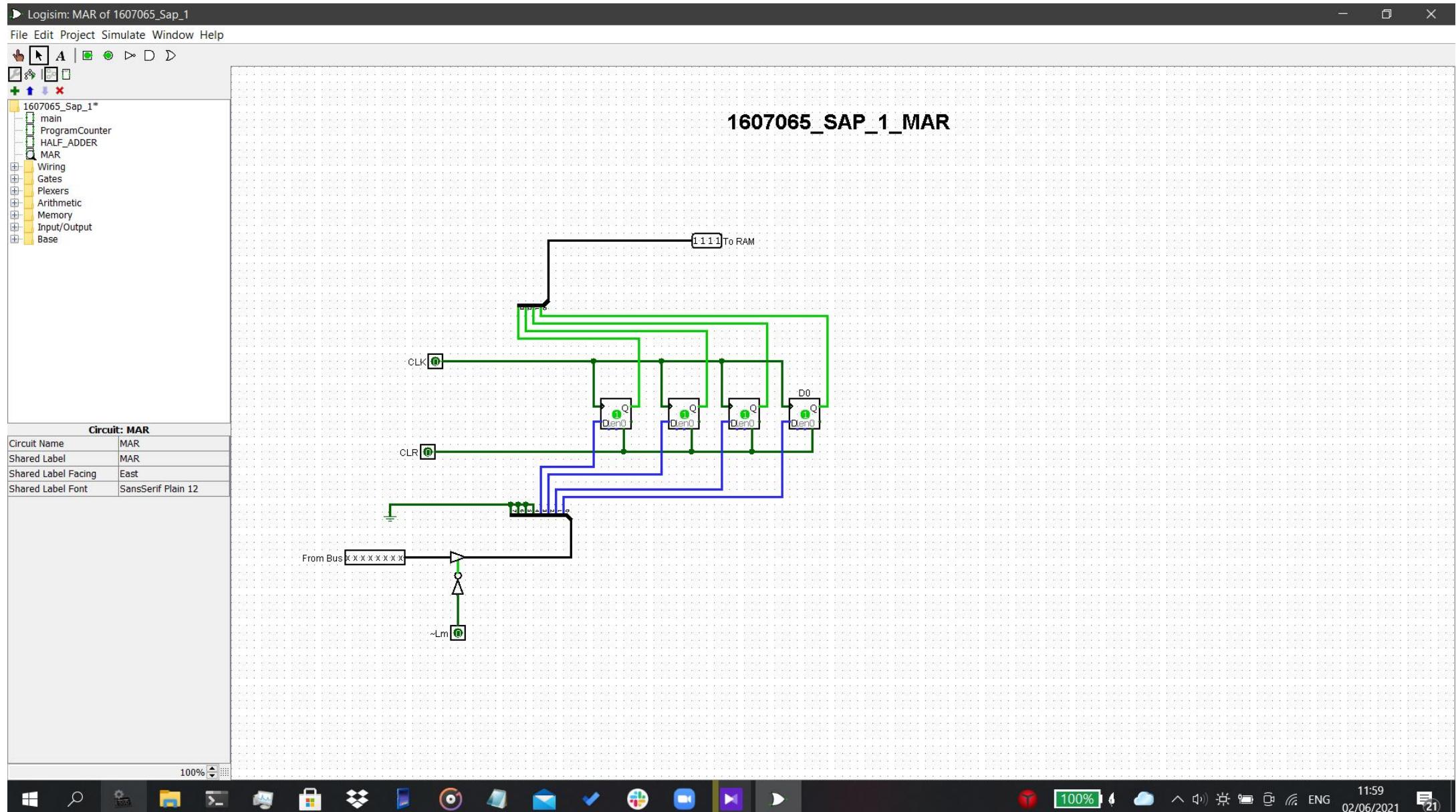


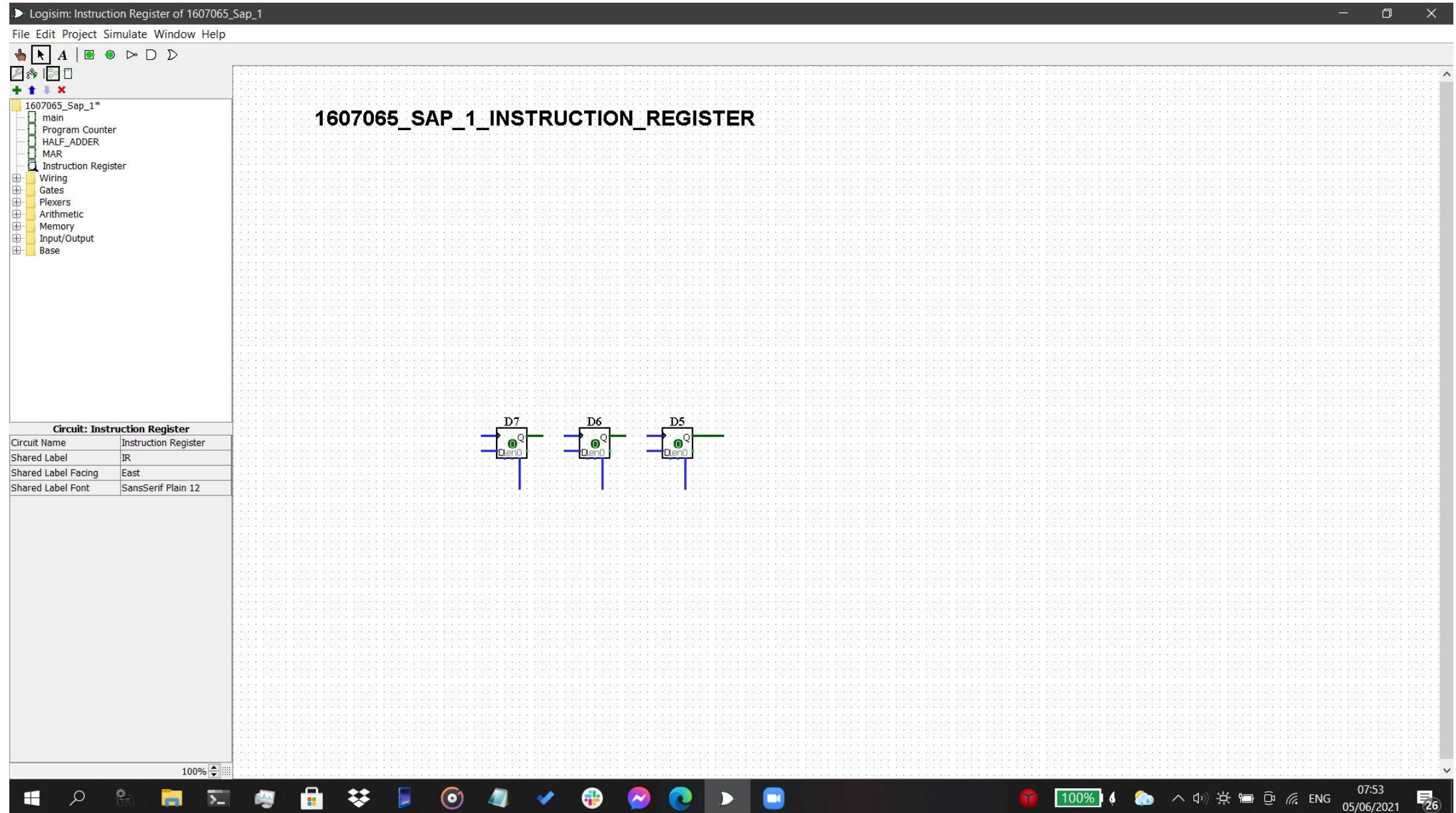


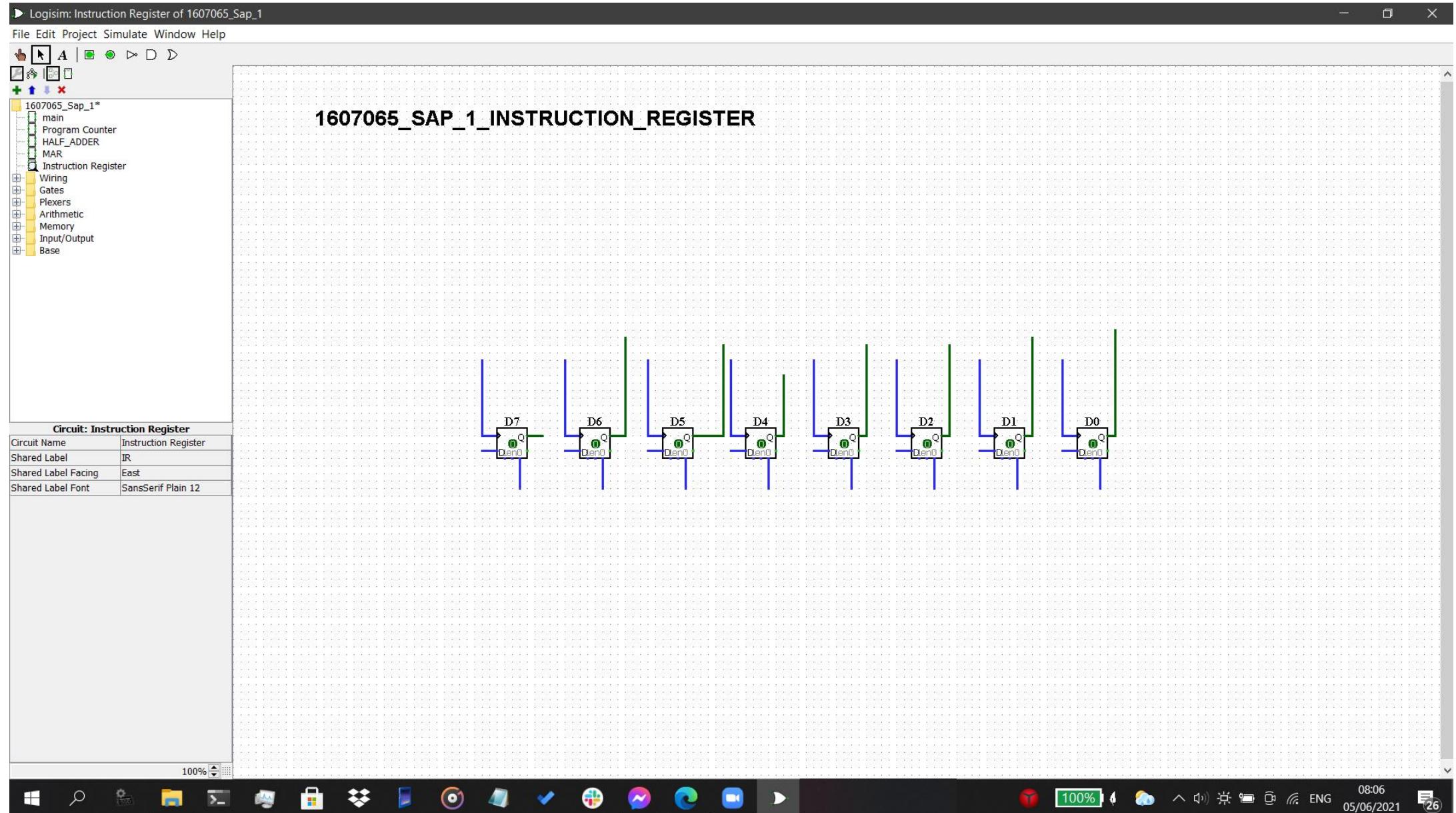


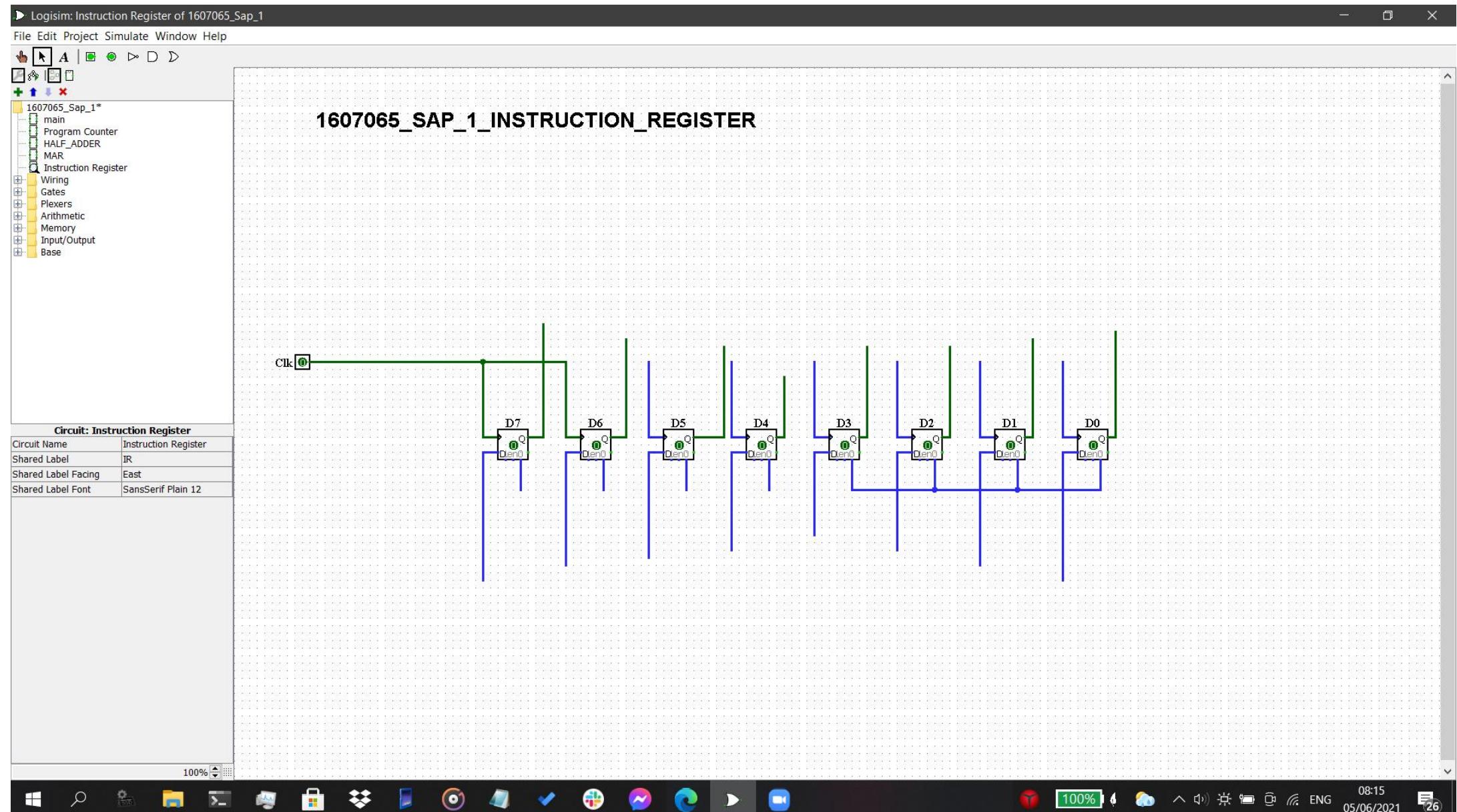


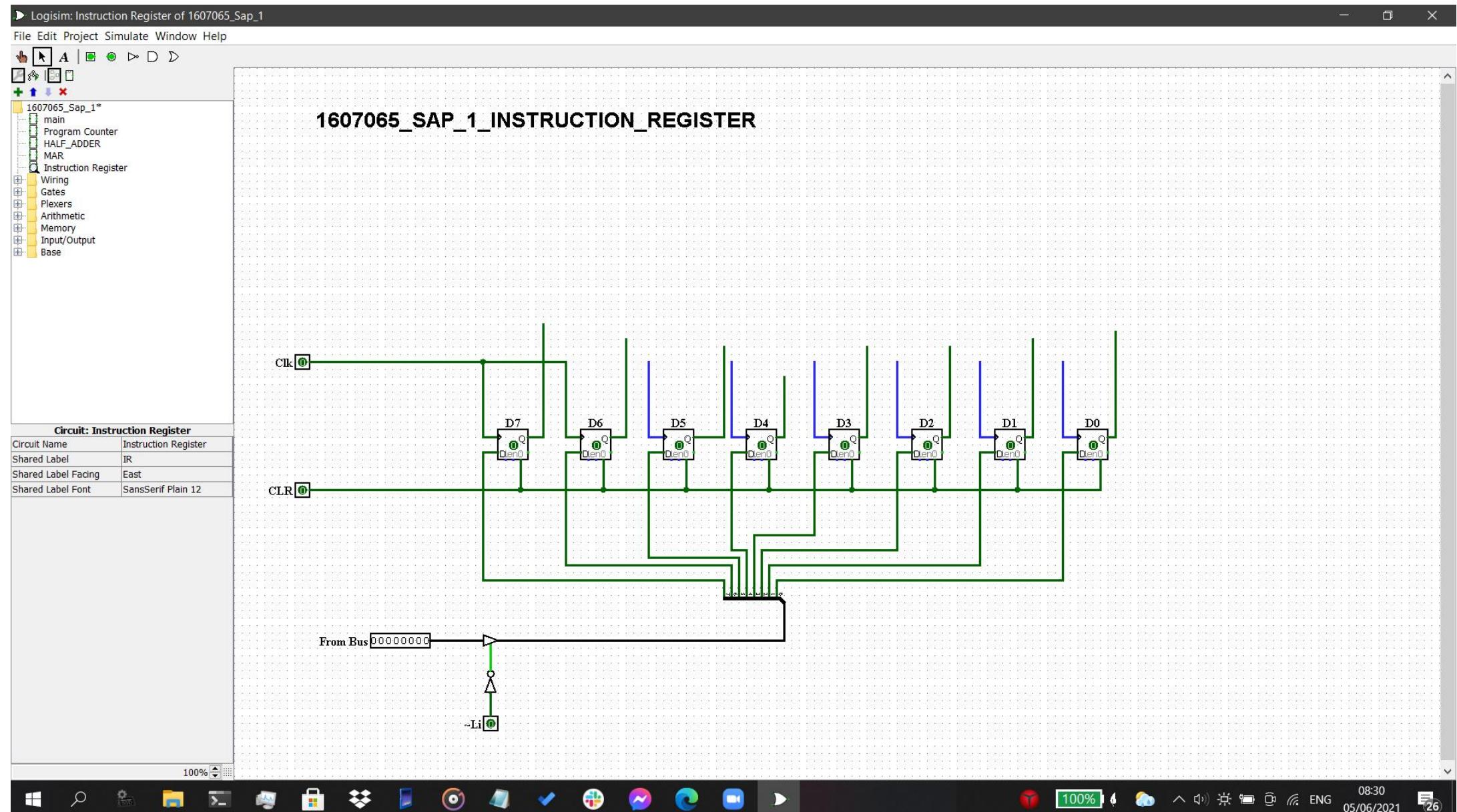


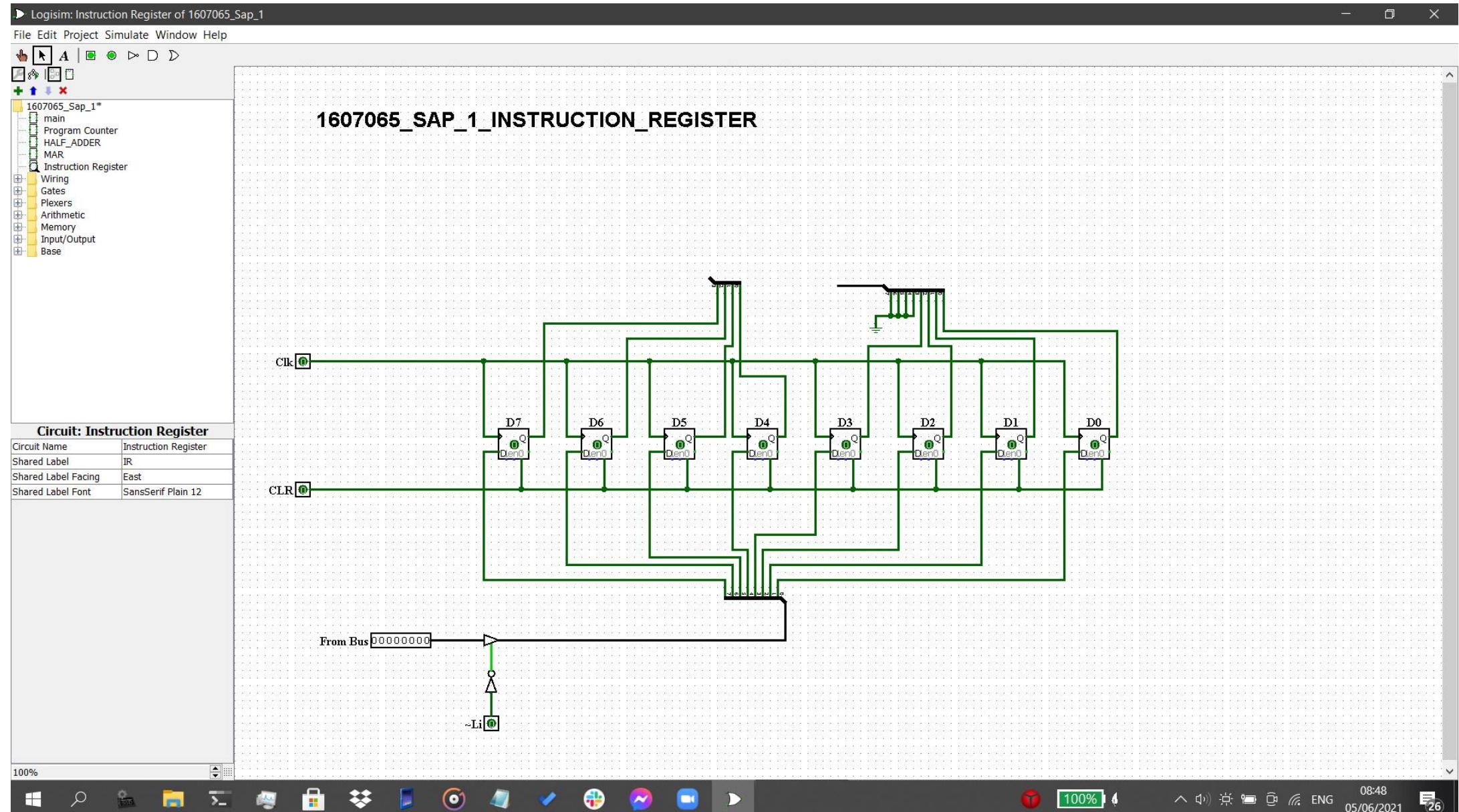


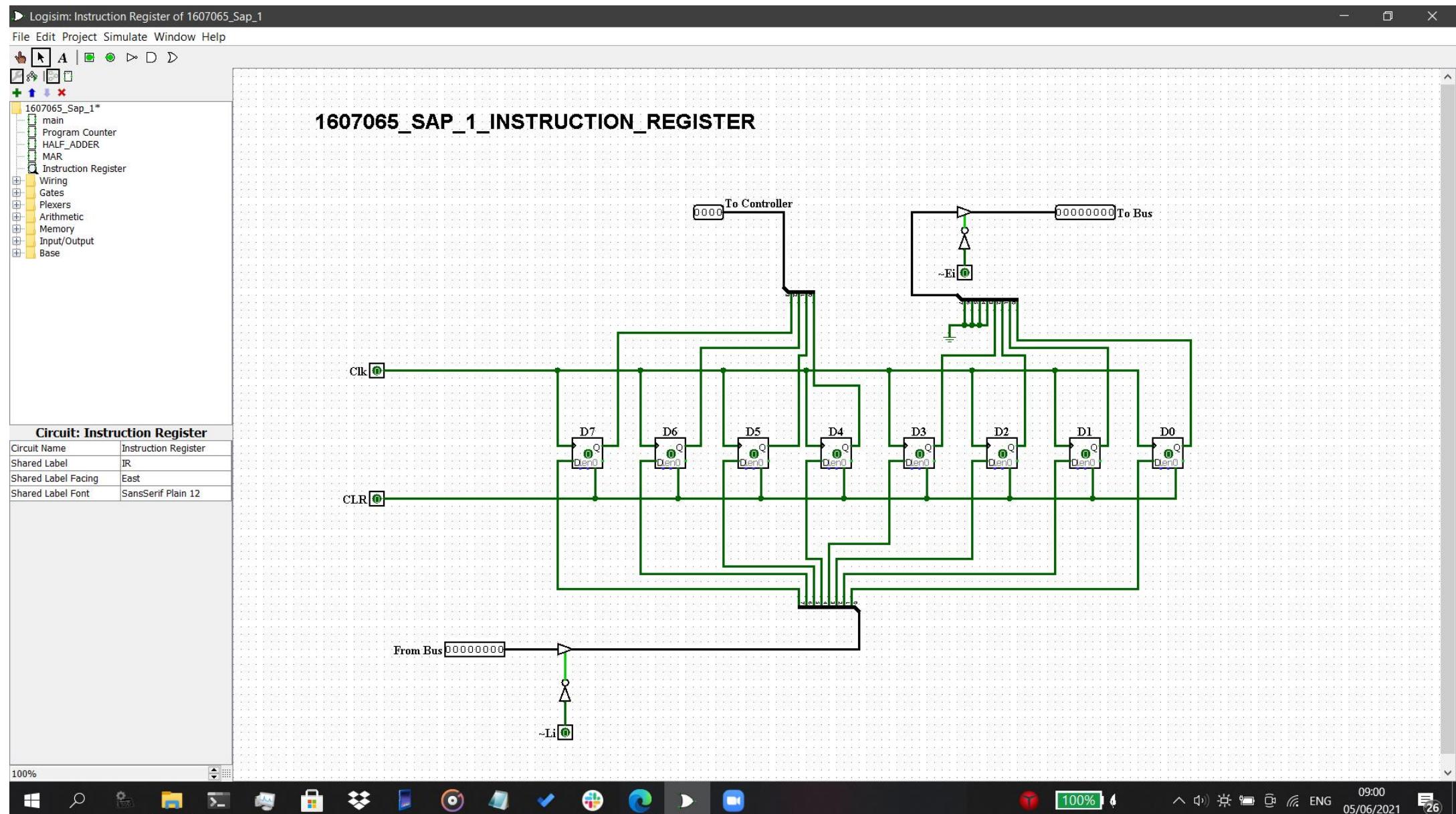












Logisim: ID of 1607065\_Sap\_1

File Edit Project Simulate Window Help

Tools

Wires

Components

Wiring

Gates

Plexers

Arithmetic

Memory

Input/Output

Base

Wires

Components

Wiring

Gates

Plexers

Arithmetic

Memory

Input/Output

Base

Wires

Components

Wiring

Gates

Plexers

Arithmetic

Memory

Input/Output

Base

Wires

Components

Wiring

Gates

Plexers

Arithmetic

Memory

Input/Output

Base

Wires

Components

Wiring

Gates

Plexers

Arithmetic

Memory

Input/Output

Base

# 1607065\_SAP\_1\_INSTRUCTION\_DECODER

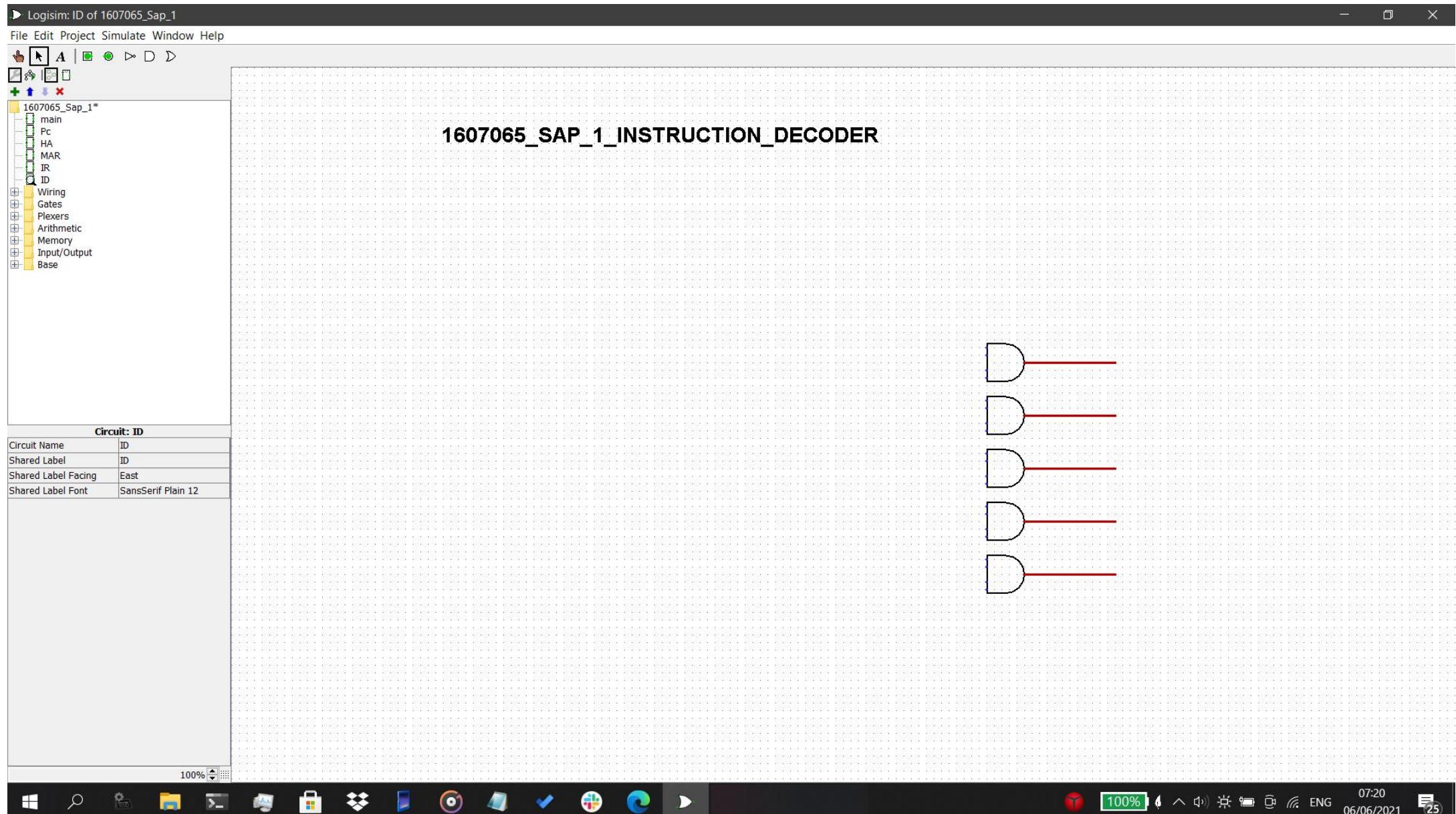


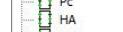
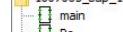
## Circuit: ID

Circuit Name	ID
Shared Label	ID
Shared Label Facing	East
Shared Label Font	SansSerif Plain 12

100%







1607065\_Sap\_1

main

Pc

HA

MAR

IR

ID

Wiring

Gates

Plexers

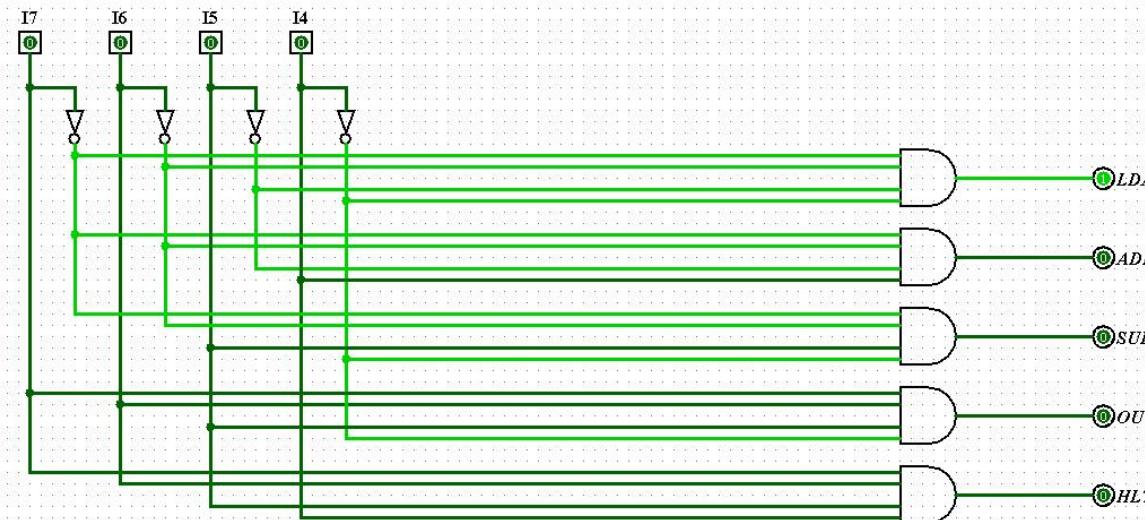
Arithmetic

Memory

Input/Output

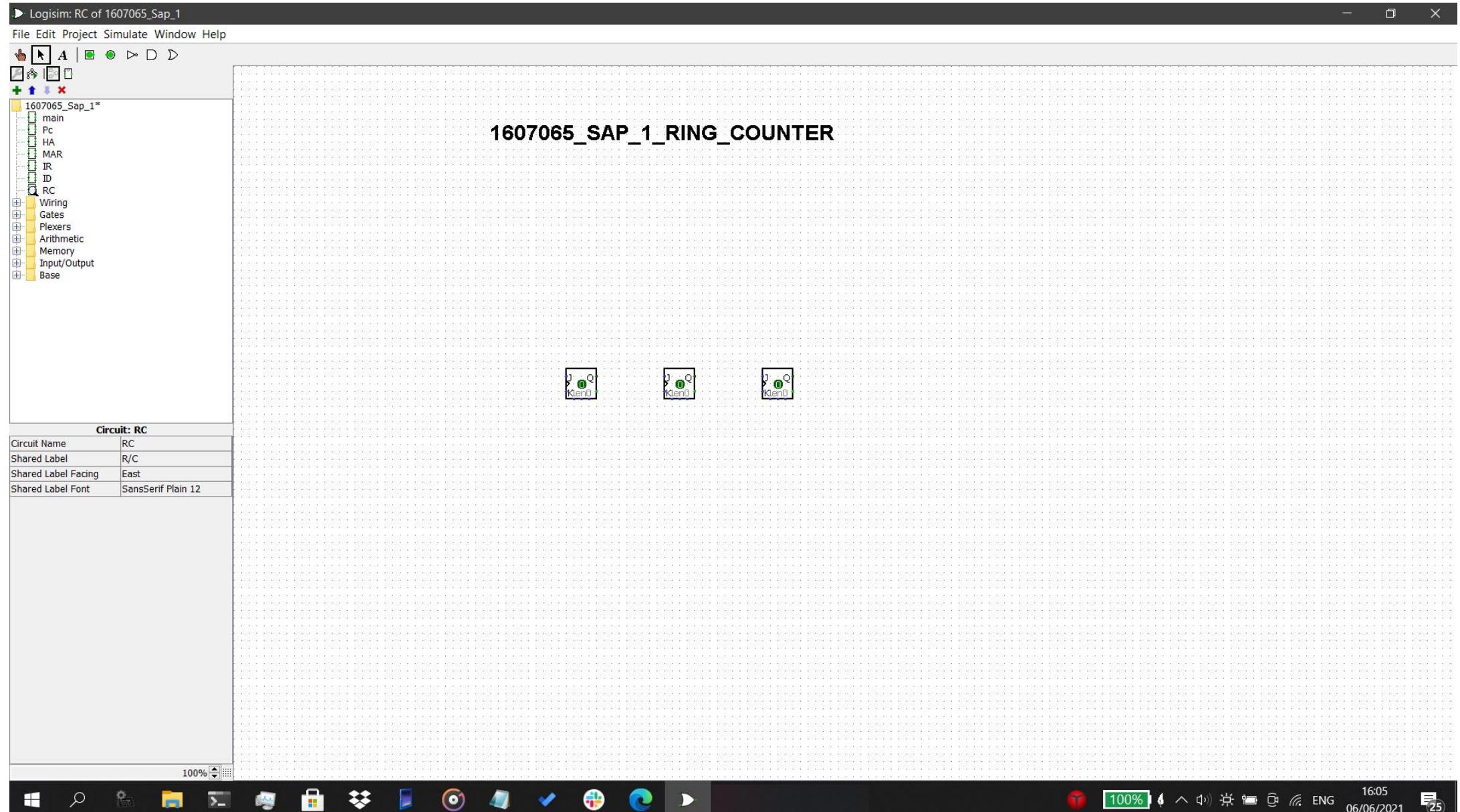
Base

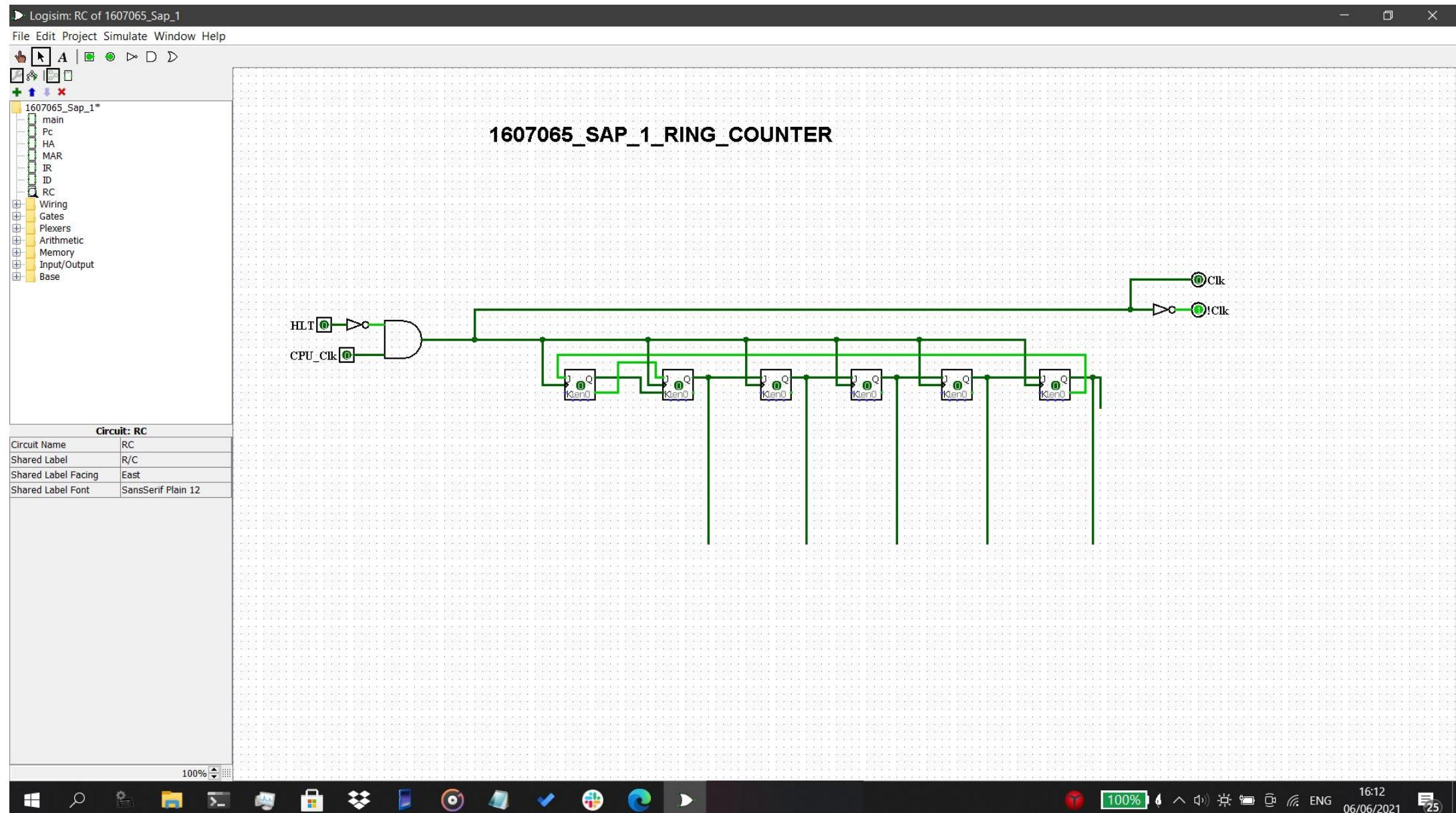
## 1607065\_SAP\_1\_INSTRUCTION\_DECODER

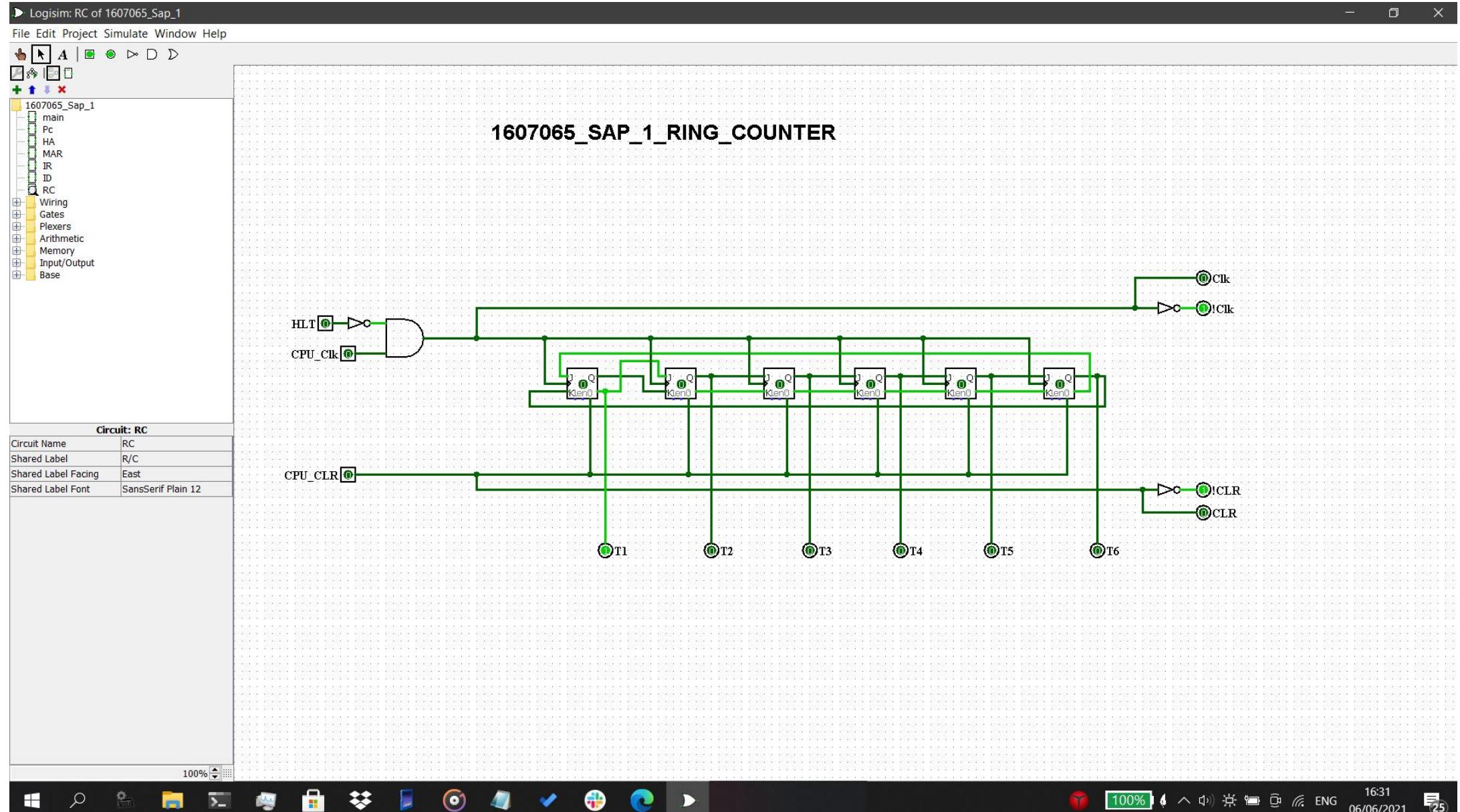


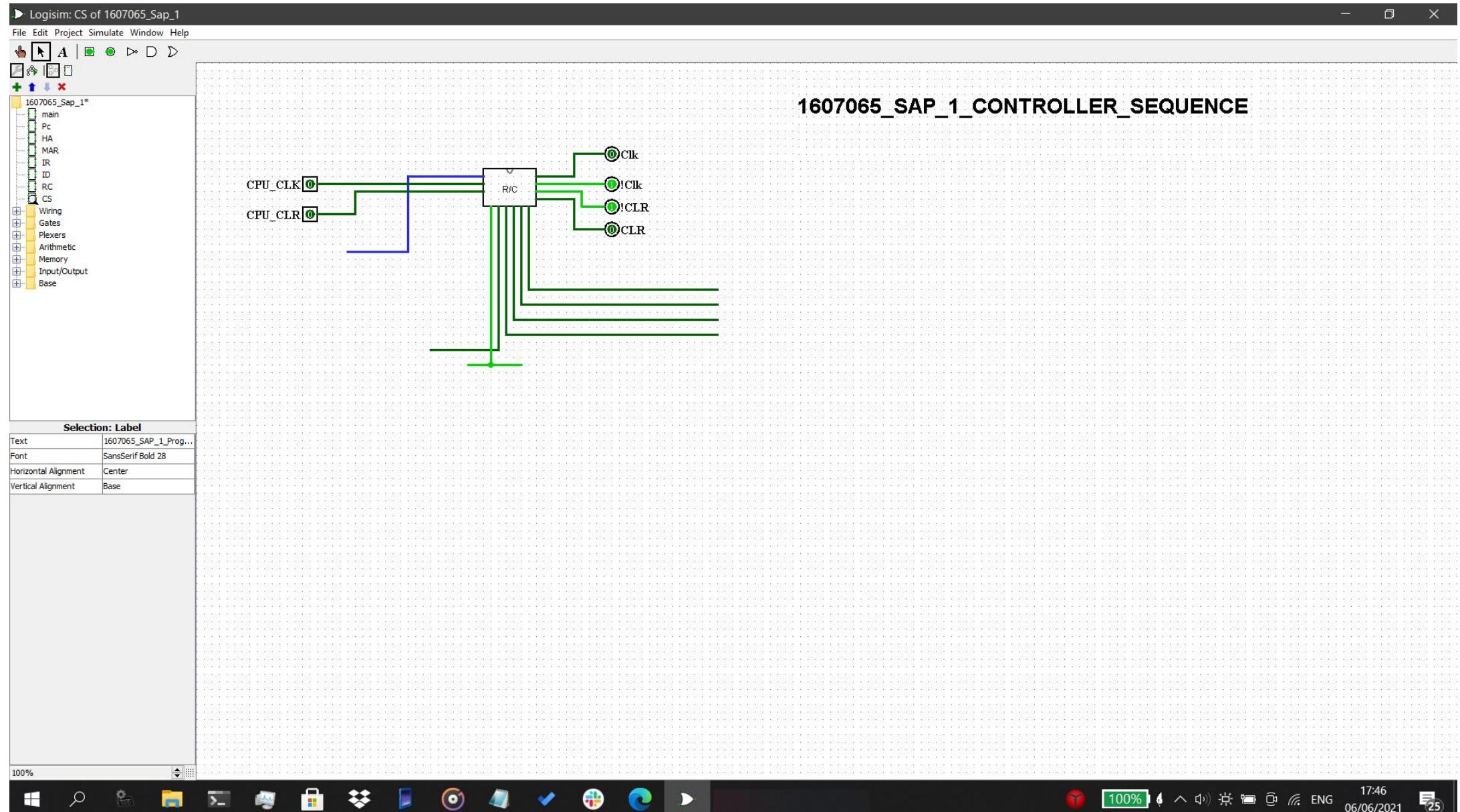
### Circuit: ID

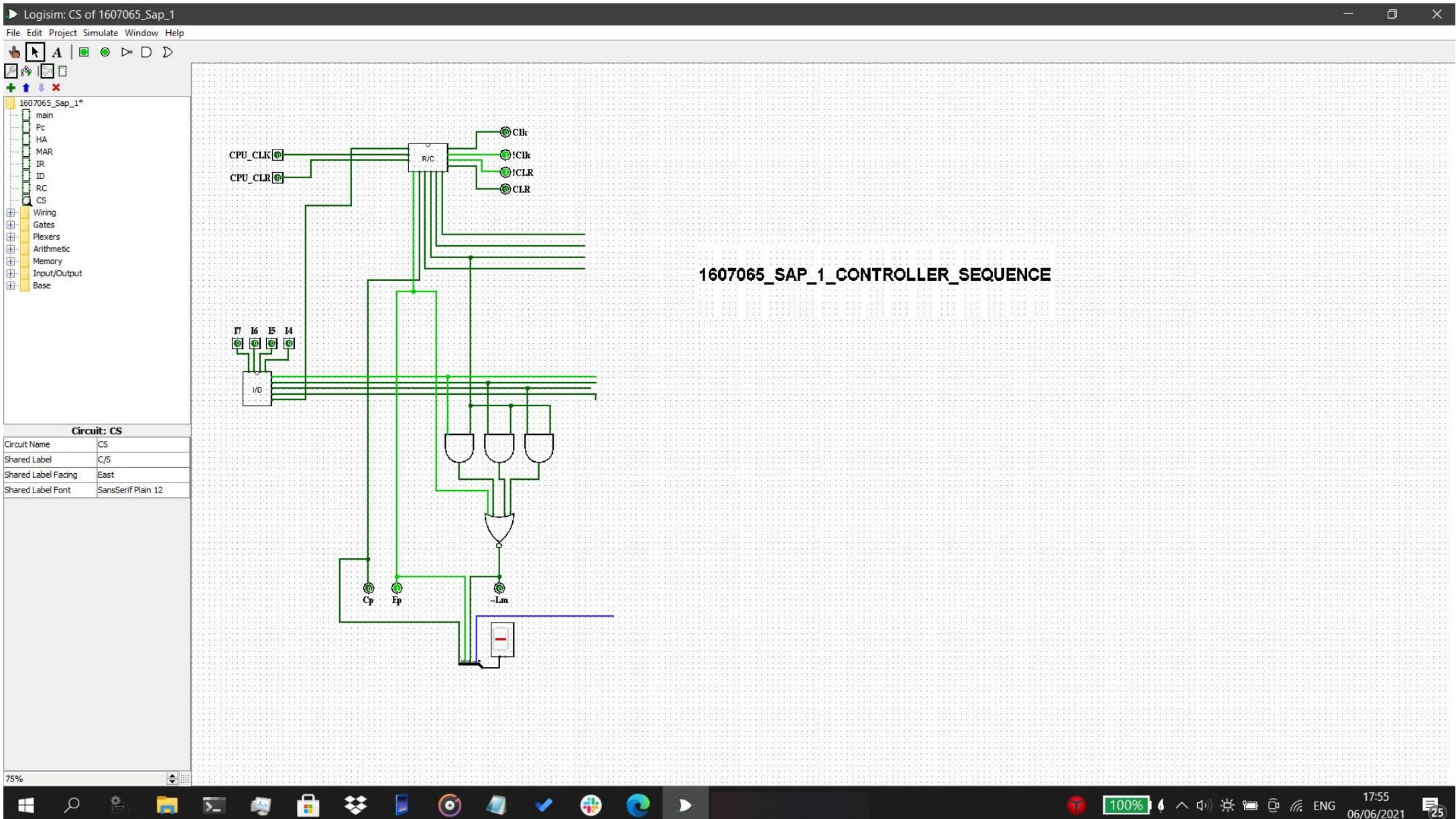
Circuit Name	ID
Shared Label	ID
Shared Label Facing	East
Shared Label Font	SansSerifPlain 12





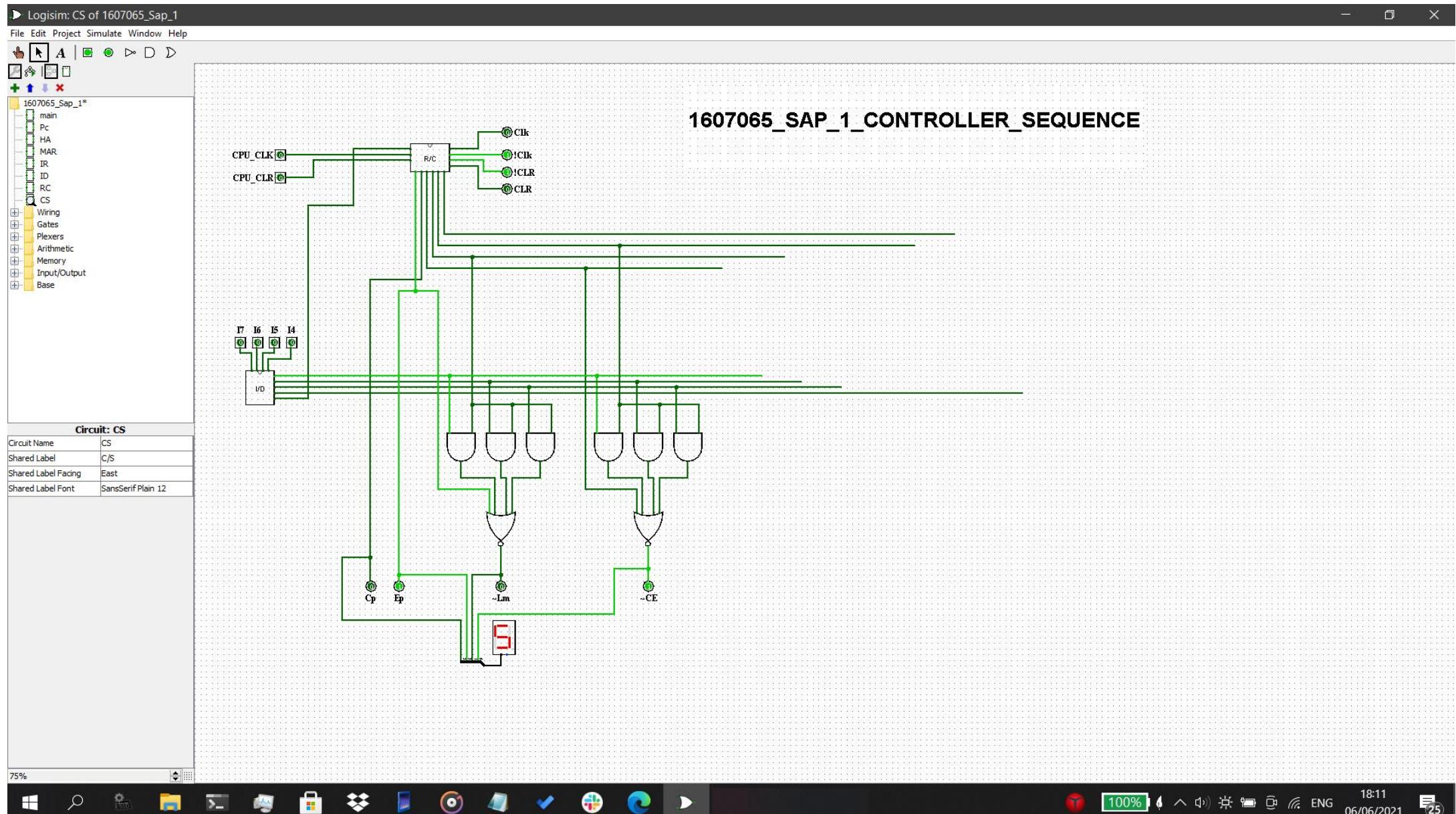


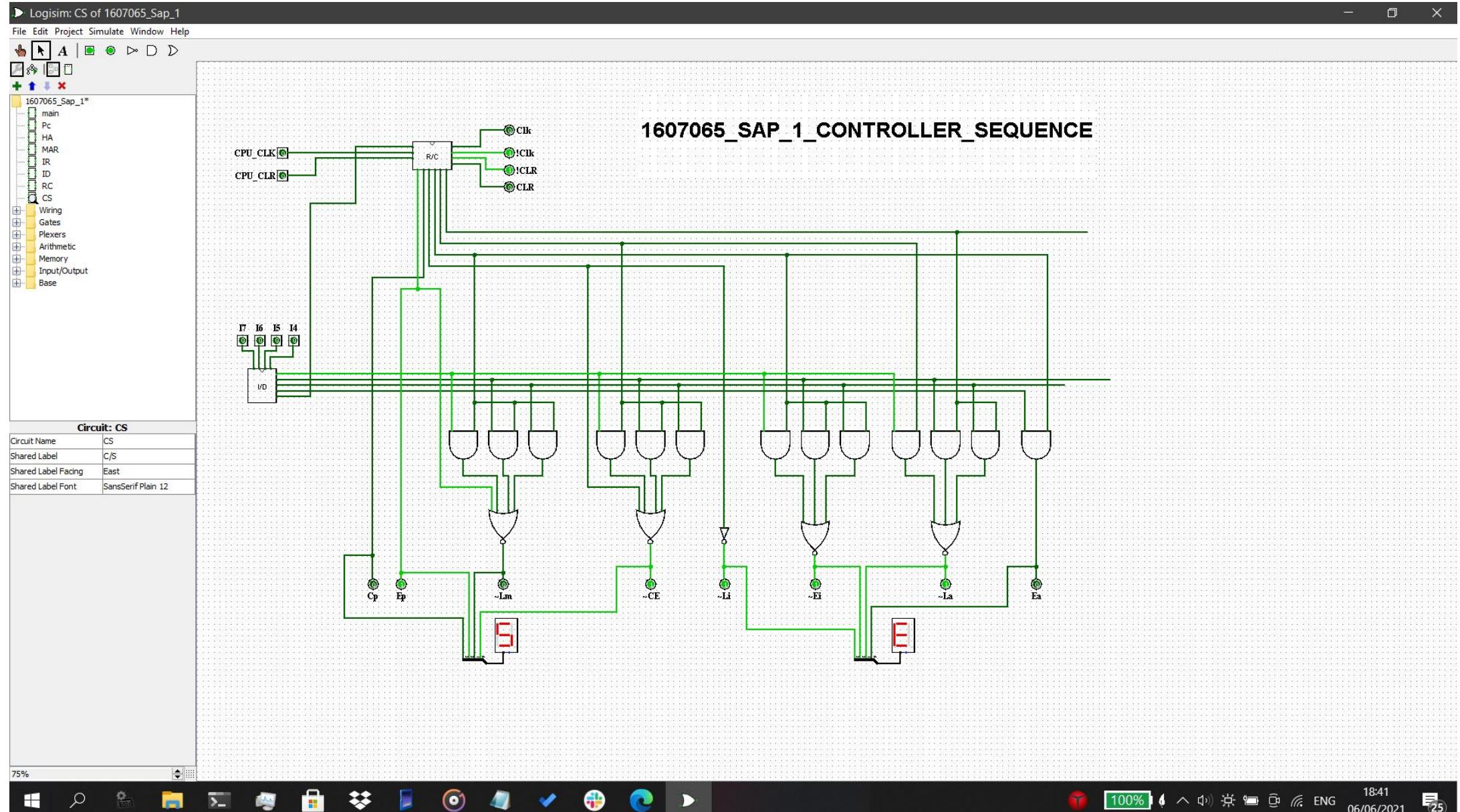


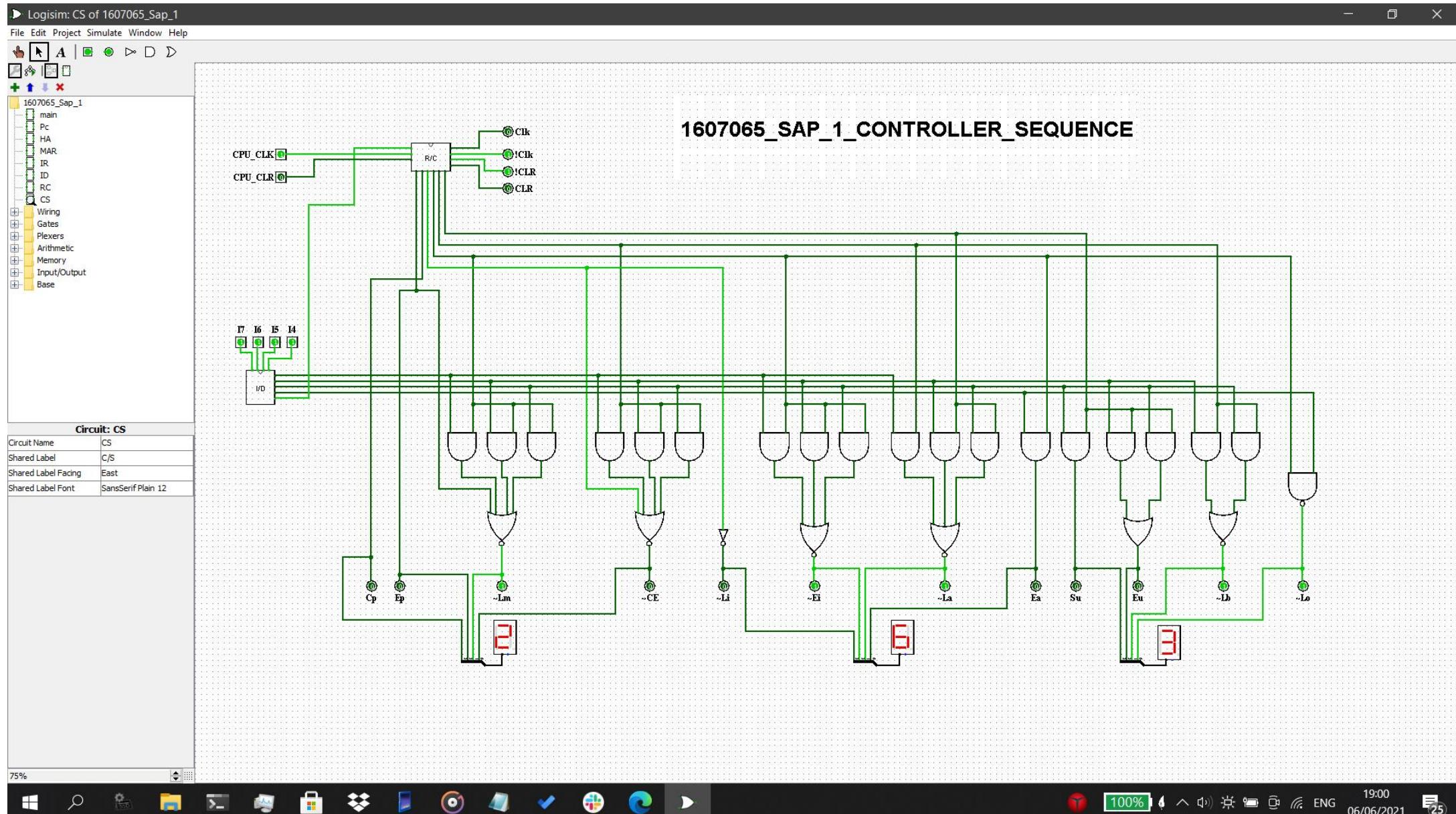


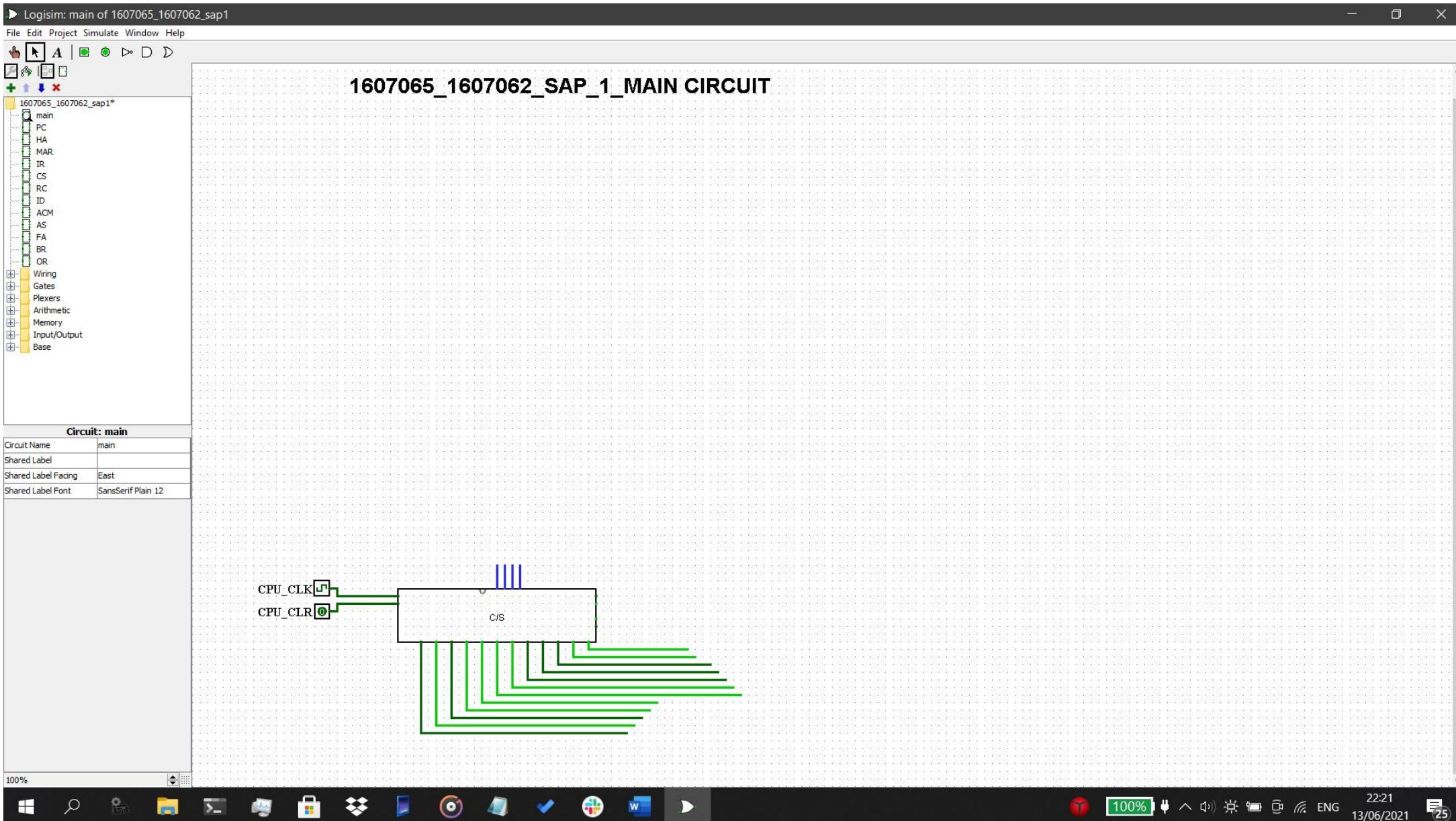
75%

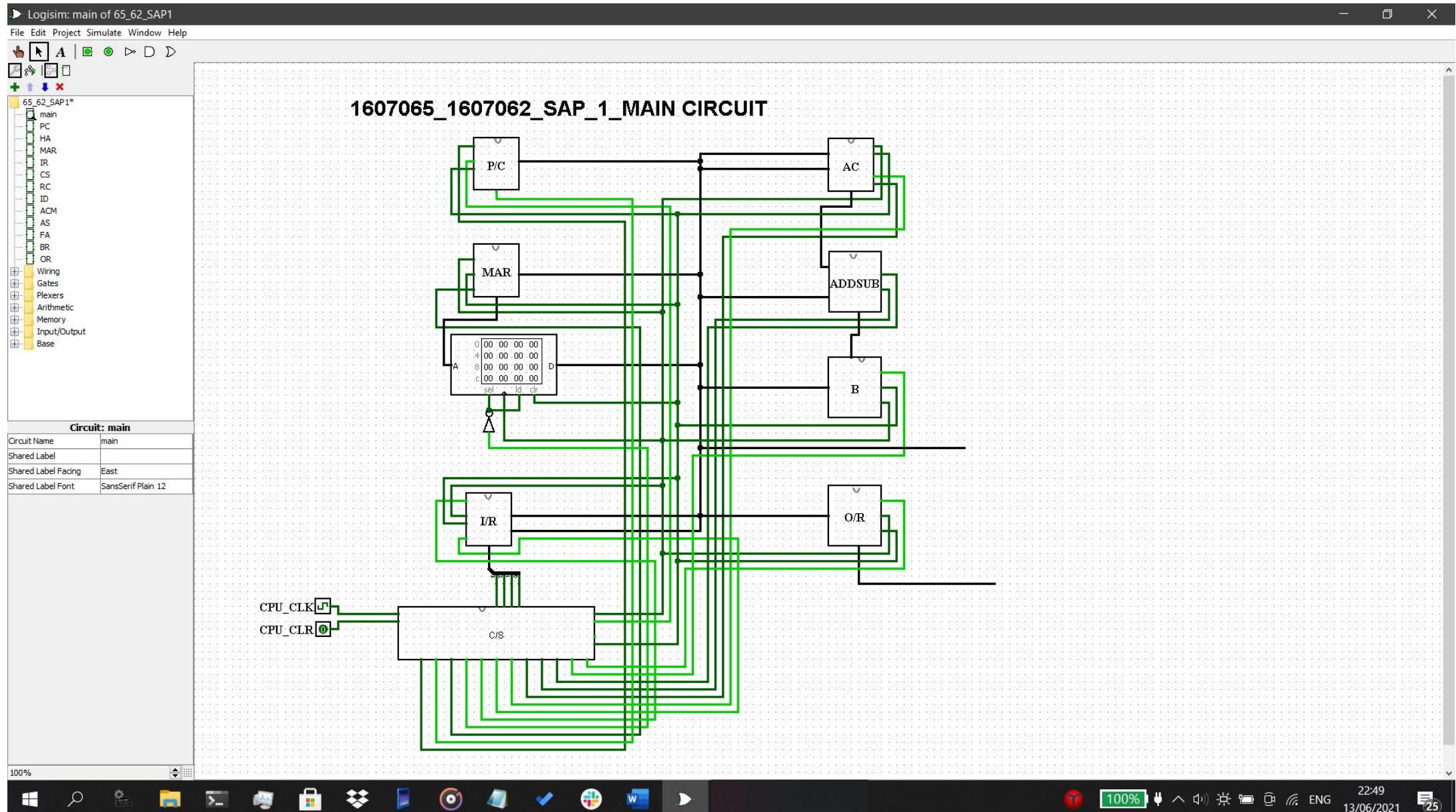


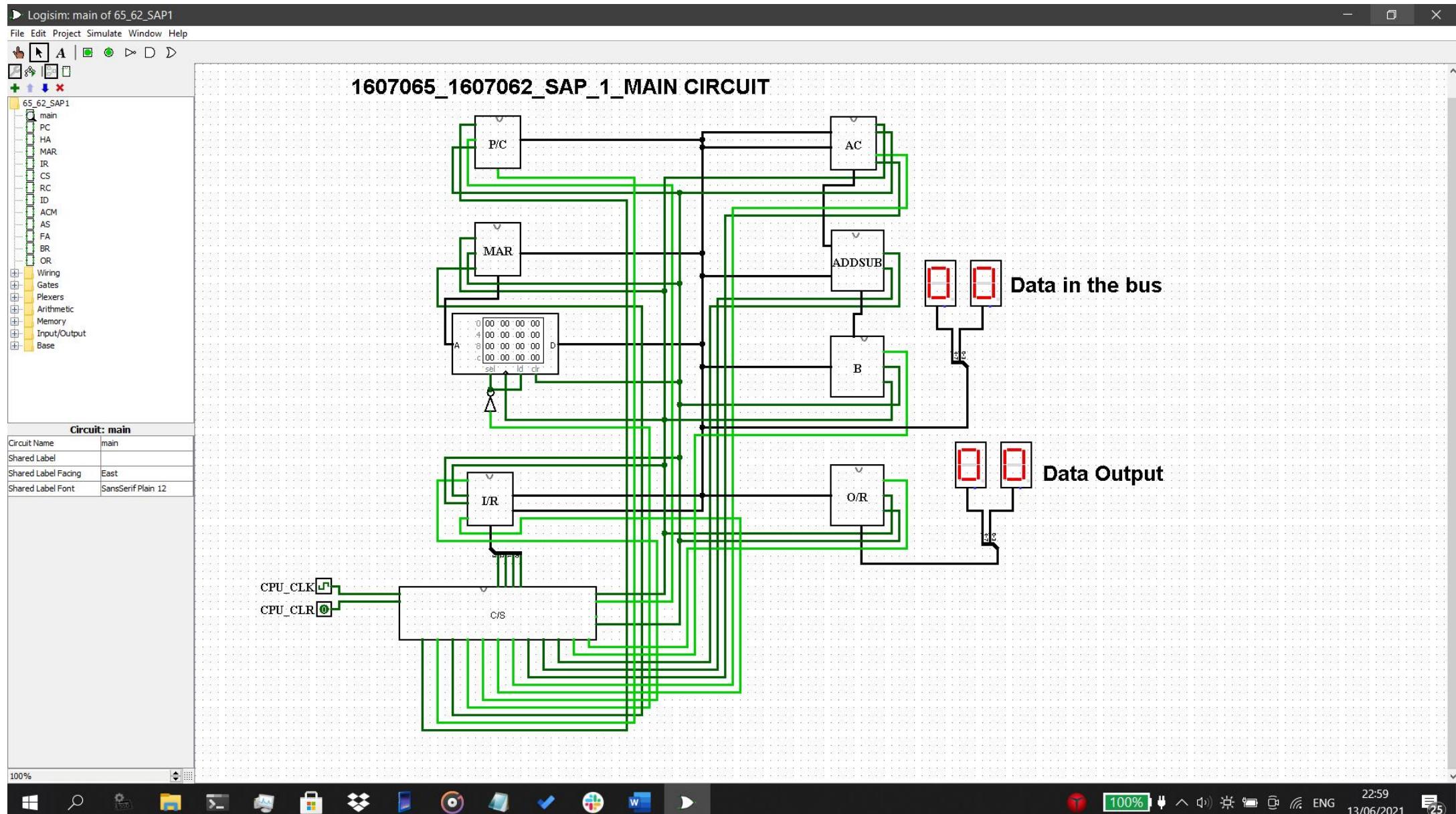






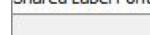
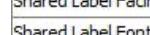
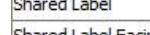
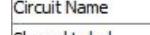
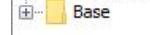
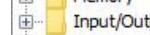
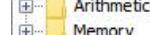
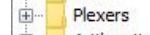
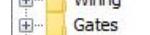
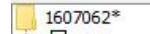






# Logisim: FA of 1607062

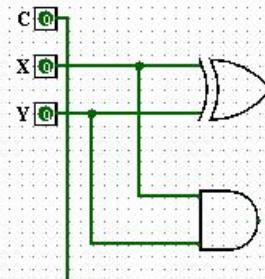
File Edit Project Simulate Window Help



## Circuit: FA

Circuit Name	FA
Shared Label	F/A
Shared Label Facing	South
Shared Label Font	Times New Roman Bold 16

## 1607062\_SAP\_1\_FULL ADDER



Activate Windows  
Go to Settings to activate Windows.

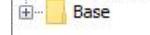
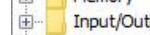
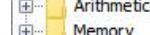
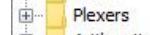
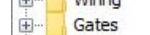
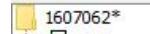
75%



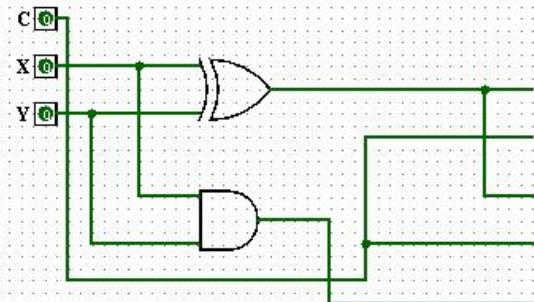
85°F Rain



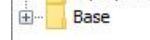
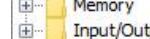
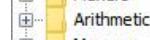
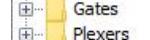
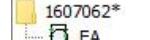
3:33 PM  
6/13/2021

**Circuit: FA**

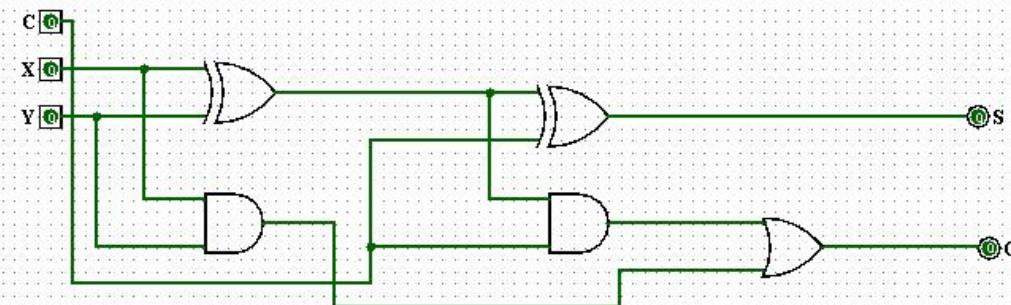
Circuit Name	FA
Shared Label	F/A
Shared Label Facing	South
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_FULL ADDER**

Activate Windows  
Go to Settings to activate Windows.

**Circuit: FA**

Circuit Name	FA
Shared Label	F/A
Shared Label Facing	South
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_FULL ADDER**

Activate Windows  
Go to Settings to activate Windows.

# Logisim: ACM of 1607062

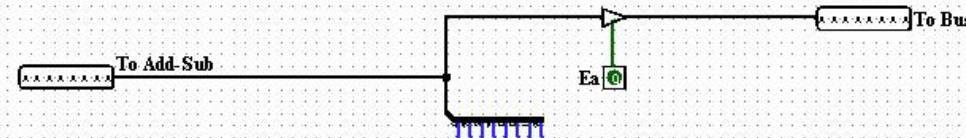
File Edit Project Simulate Window Help

↶ A ↷ ↴ ↵ ↸ ↹



1607062\*  
ACM  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

## 1607062\_SAP\_1\_ACCUMULATOR



### Circuit: ACM

Circuit Name	ACM
Shared Label	AC
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

75%



Type here to search



86°F Rain showers



6:02 PM  
6/13/2021

Activate Windows  
Go to Settings to activate Windows.

## Logisim: ACM of 1607062

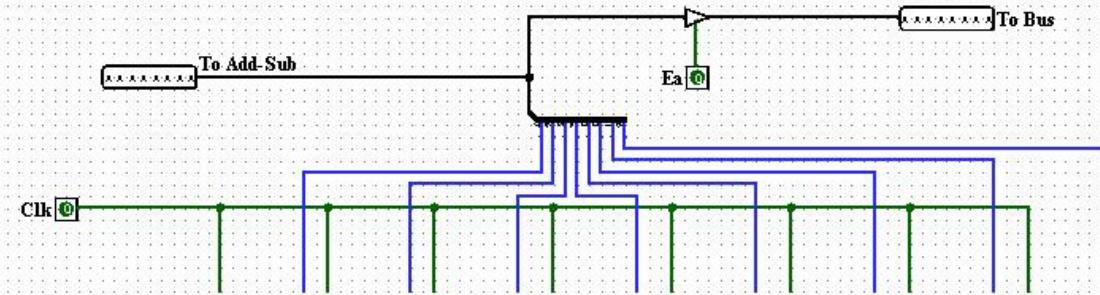
File Edit Project Simulate Window Help

A | D D



1607062\*  
ACM  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

## 1607062\_SAP\_1\_ACCUMULATOR



## Circuit: ACM

Circuit Name	ACM
Shared Label	AC
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

Activate Windows  
Go to Settings to activate Windows.

75%



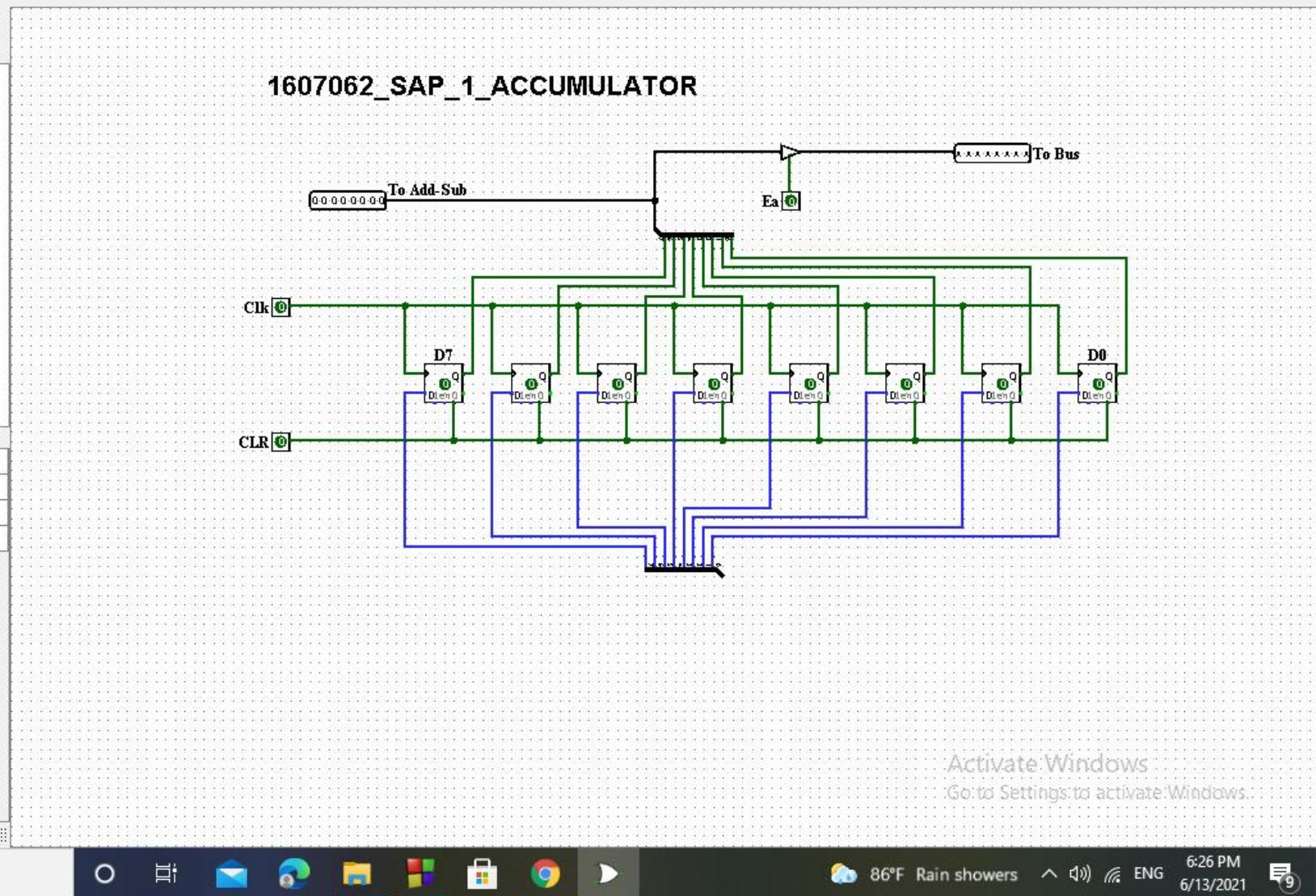
86°F Rain showers ENG 6:11 PM  
6/13/2021



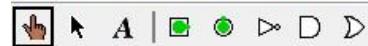
1607062*
ACM
FA
Wiring
Gates
Plexers
Arithmetic
Memory
Input/Output
Base

**Circuit: ACM**

Circuit Name	ACM
Shared Label	AC
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16



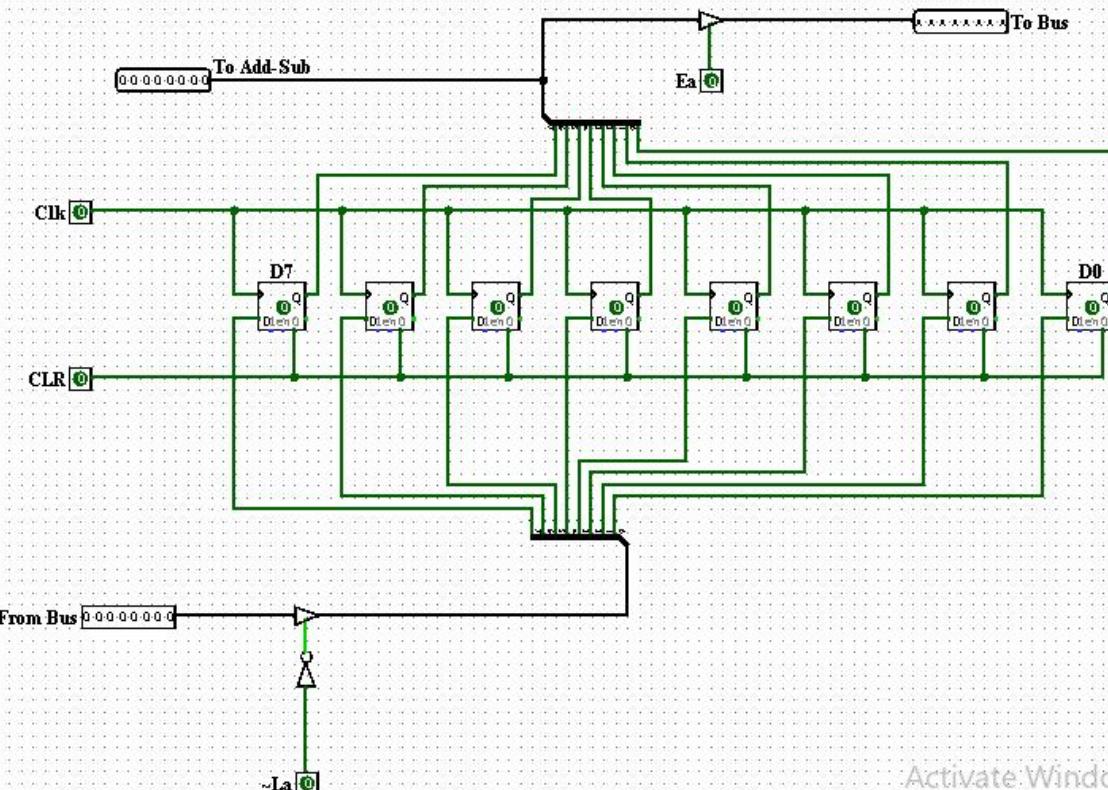
Activate Windows  
Go to Settings to activate Windows.



1607062\*  
ACM  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: ACM**

Circuit Name	ACM
Shared Label	AC
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_ACCUMULATOR**

Activate Windows  
Go to Settings to activate Windows.

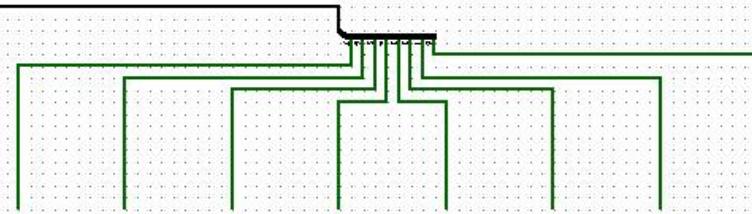
A set of small tool icons typically found in CAD software, including a hand, a selection tool, and various line and shape drawing tools.



1607062\*  
main  
ACM  
AS  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

## 1607062\_SAP\_1\_ADDER SUBTRACTOR

From B register 00000000



### Circuit: AS

Circuit Name	AS
Shared Label	ADDSUB
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

75%



Type here to search



86°F Rain showers

ENG  
6/13/2021

Activate Windows  
Go to Settings to activate Windows.





1607062*
main
ACM
AS
FA
Wiring
Gates
Plexers
Arithmetic
Memory
Input/Output
Base

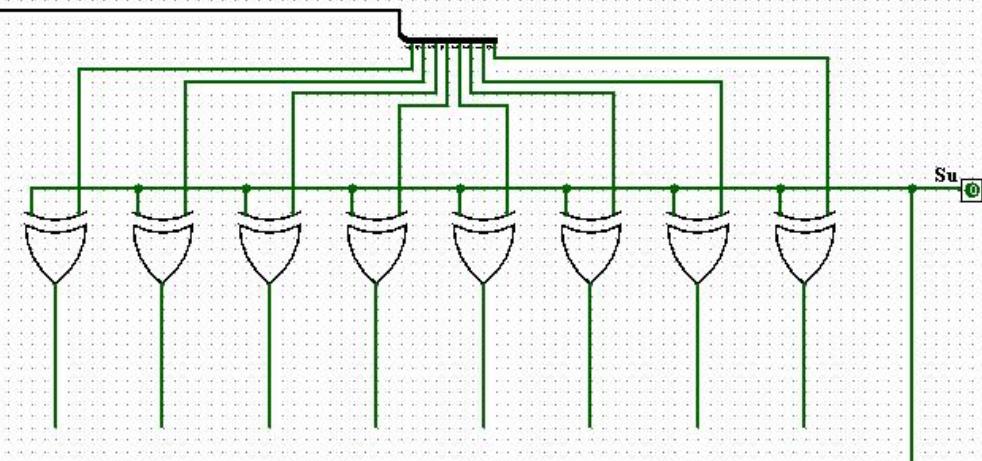
**Circuit: AS**

Circuit Name	AS
Shared Label	ADDSUB
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_ADDER SUBTRACTOR**

From B register 00000000

Eu ①



Activate Windows  
Go to Settings to activate Windows.



1607062\*  
main  
ACM  
AS  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: AS**

Circuit Name	AS
Shared Label	ADDSUB
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_ADDER SUBTRACTOR**

From B register 00000000

Eu ①

Su ①

To Bus

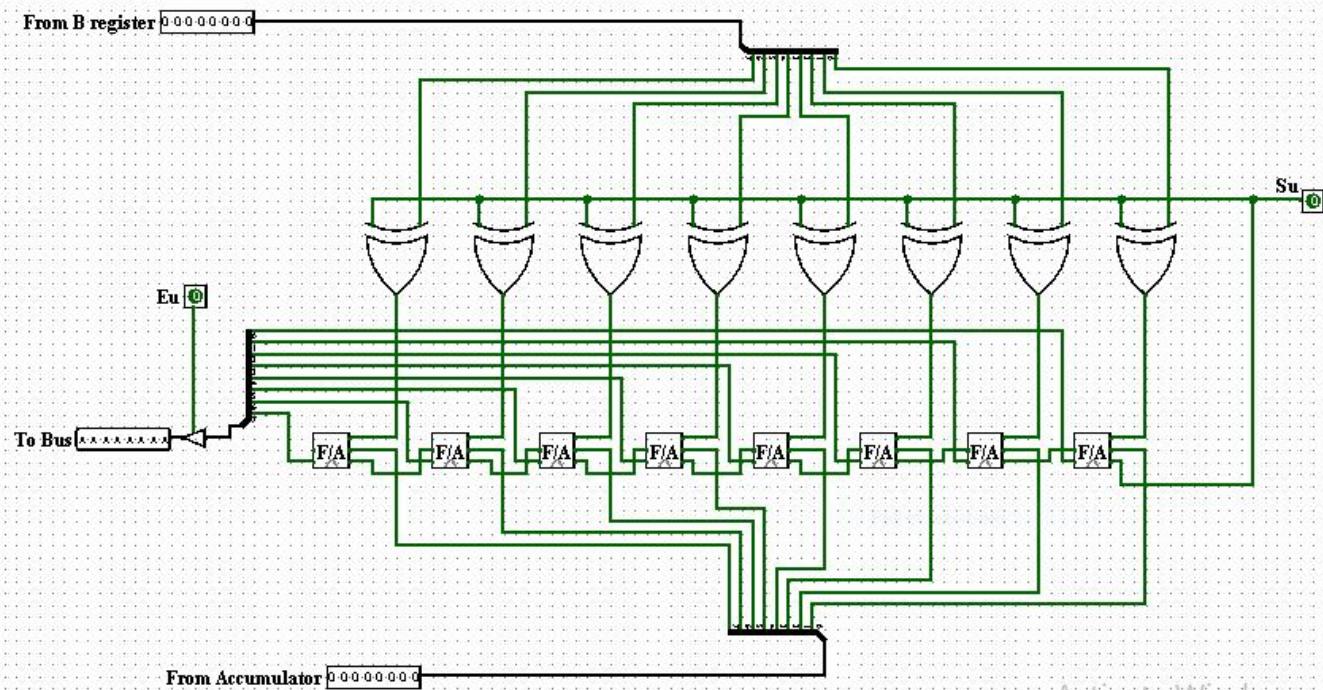
Activate Windows  
Go to Settings to activate Windows.



1607062\*  
main  
ACM  
AS  
FA  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: AS**

Circuit Name	AS
Shared Label	ADDSUB
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_ADDER SUBTRACTOR**

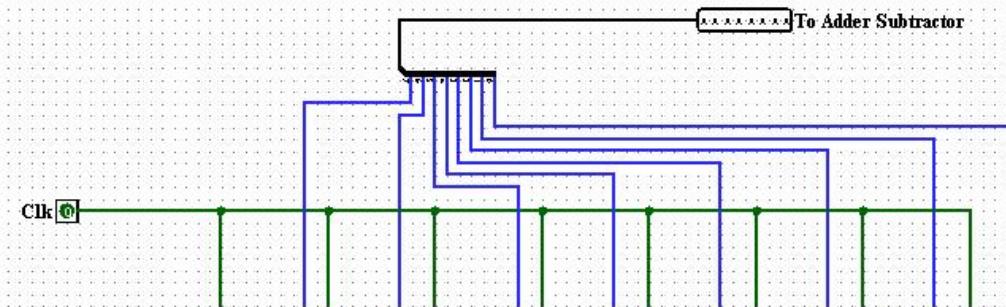
Activate Windows  
Go to Settings to activate Windows.



1607062\*  
main  
ACM  
AS  
FA  
BR  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: BR**

Circuit Name	BR
Shared Label	B
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_B\_REGISTER**

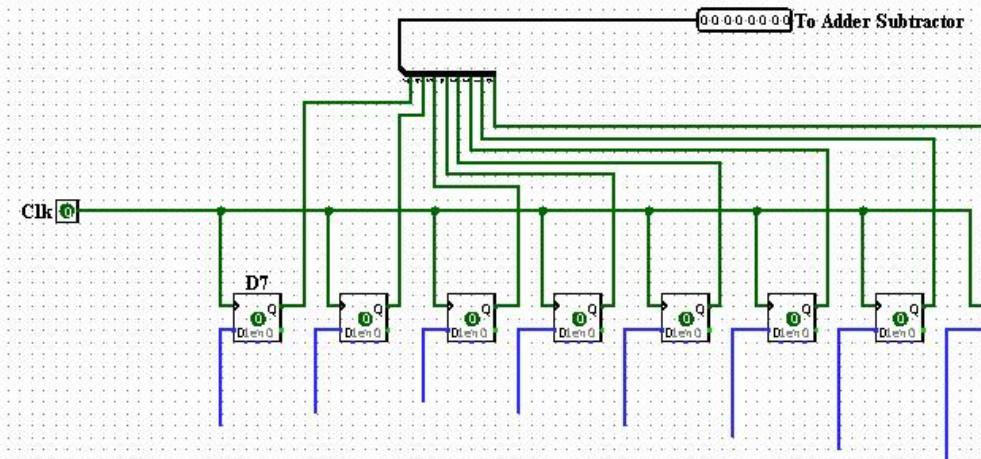
Activate Windows  
Go to Settings to activate Windows.



1607062\*  
main  
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FA  
BR  
Wiring  
Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: BR**

Circuit Name	BR
Shared Label	B
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_B\_REGISTER**

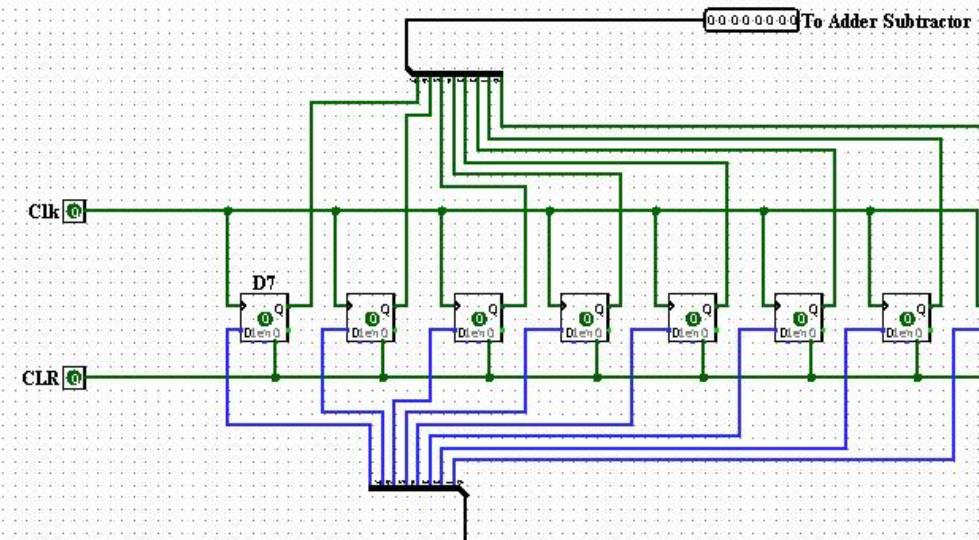
Activate Windows  
Go to Settings to activate Windows.



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Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

**Circuit: BR**

Circuit Name	BR
Shared Label	B
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

**1607062\_SAP\_1\_B\_REGISTER**

Activate Windows  
Go to Settings to activate Windows.

## Logisim: BR of 1607062

File Edit Project Simulate Window Help

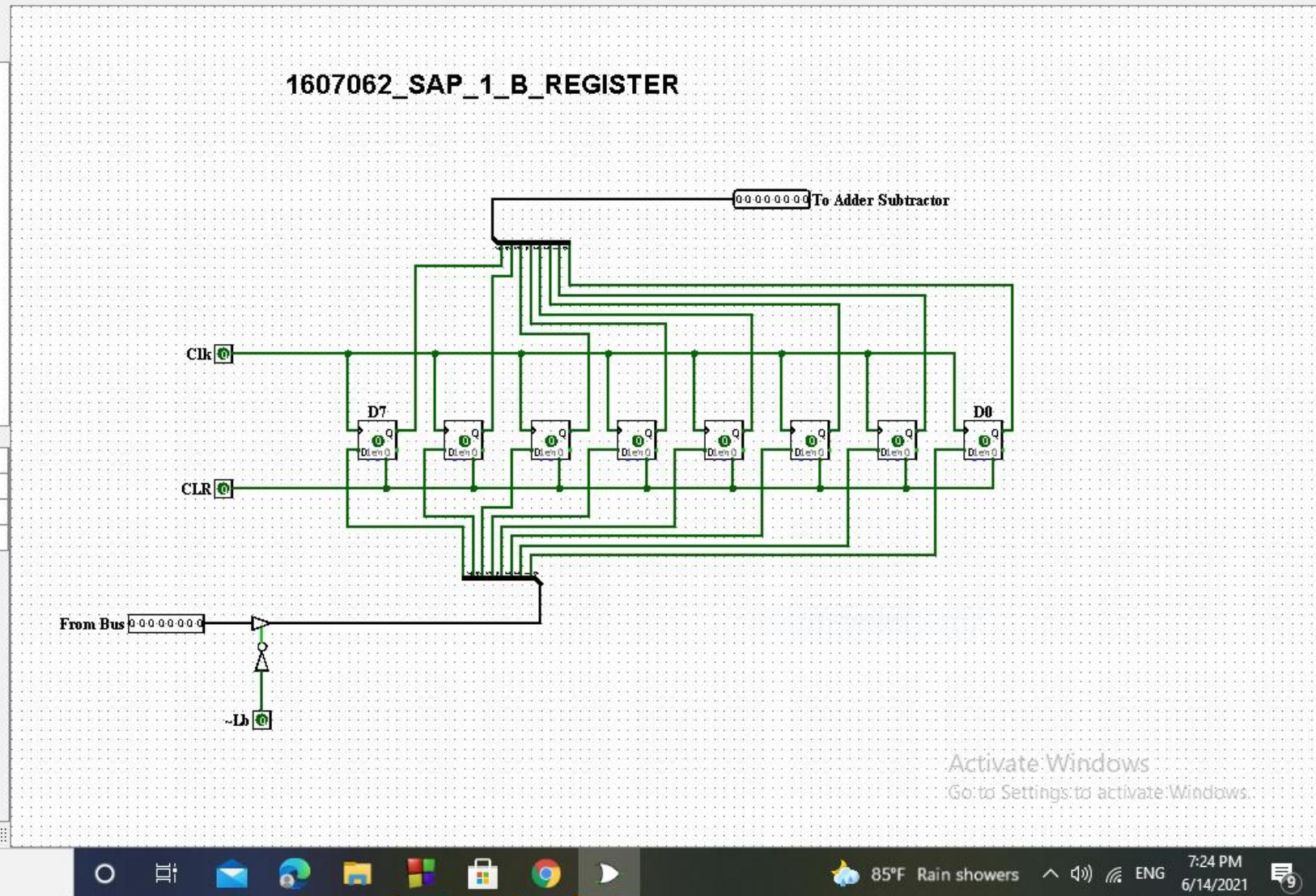
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Input/Output  
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## Circuit: BR

Circuit Name	BR
Shared Label	B
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16



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85°F Rain showers

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# Logisim: OR of 1607062

File Edit Project Simulate Window Help

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1607062\*

main

ACM

AS

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BR

OR

Wiring

Gates

Plexers

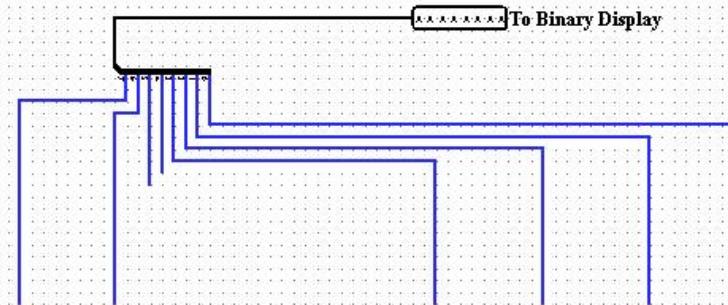
Arithmetic

Memory

Input/Output

Base

## 1607062\_SAP\_1\_OUTPUT\_REGISTER



### Circuit: OR

Circuit Name	OR
Shared Label	O/R
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Activate Windows  
Go to Settings to activate Windows.

## Logisim: OR of 1607062

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File Edit Project Simulate Window Help

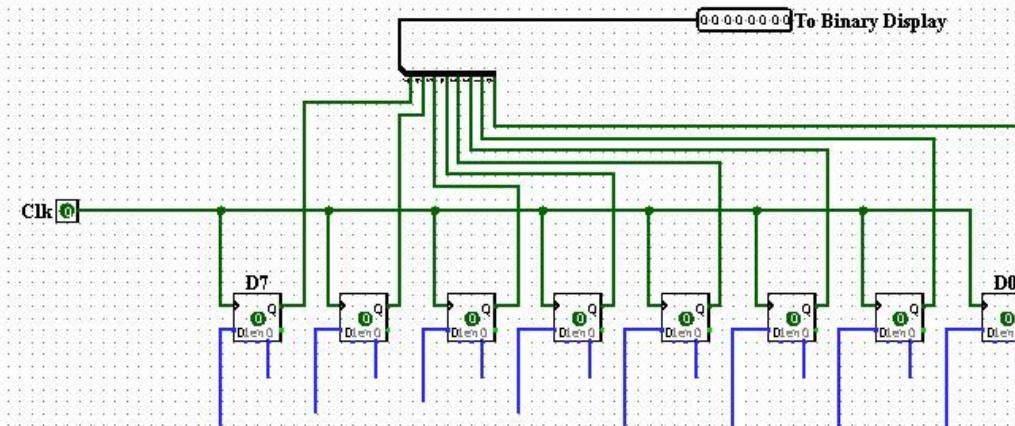


1607062*
main
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OR
Wiring
Gates
Plexers
Arithmetic
Memory
Input/Output
Base

## Circuit: OR

Circuit Name	OR
Shared Label	O/R
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

## 1607062\_SAP\_1\_OUTPUT\_REGISTER



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# Logisim: OR of 1607062

File Edit Project Simulate Window Help

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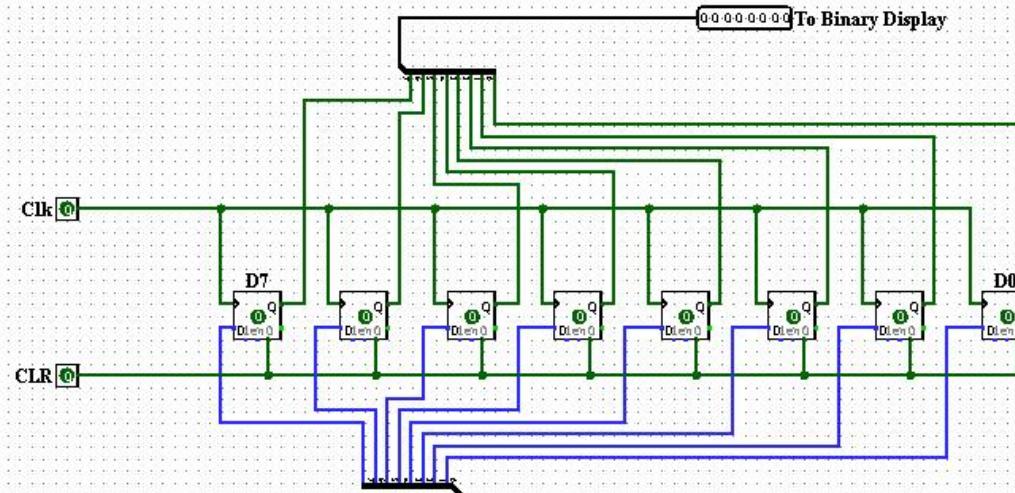


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Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

## Circuit: OR

Circuit Name	OR
Shared Label	O/R
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

## 1607062\_SAP\_1\_OUTPUT\_REGISTER



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## Logisim: OR of 1607062

File Edit Project Simulate Window Help

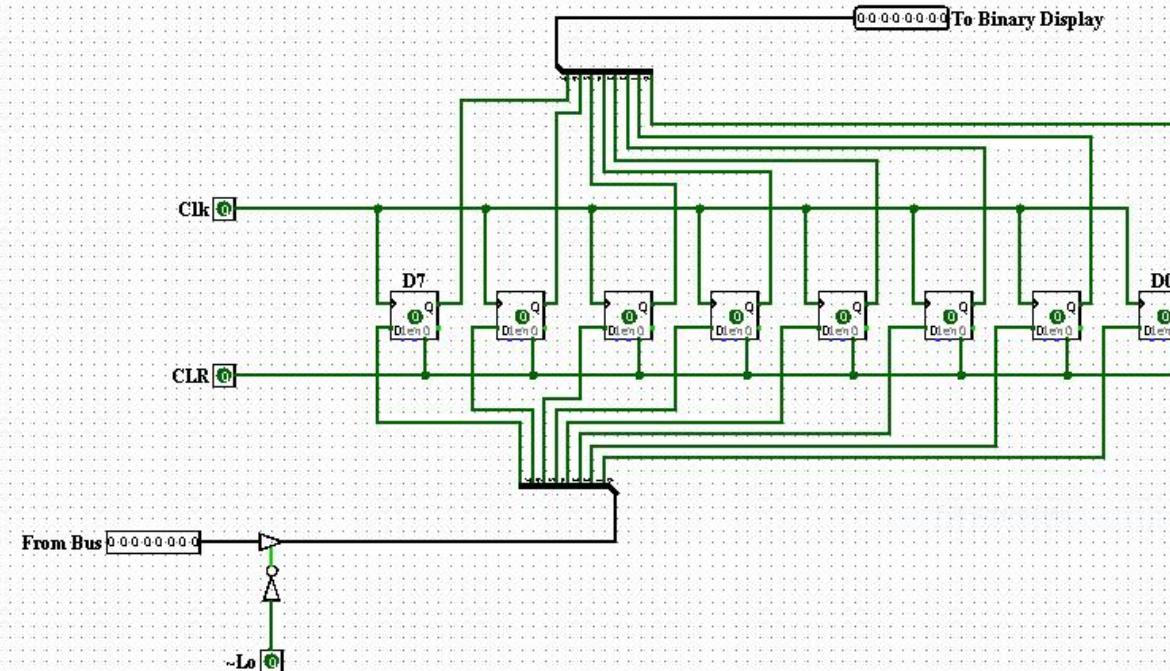


1607062  
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Gates  
Plexers  
Arithmetic  
Memory  
Input/Output  
Base

## Circuit: OR

Circuit Name	OR
Shared Label	O/R
Shared Label Facing	North
Shared Label Font	Times New Roman Bold 16

## 1607062\_SAP\_1\_OUTPUT\_REGISTER

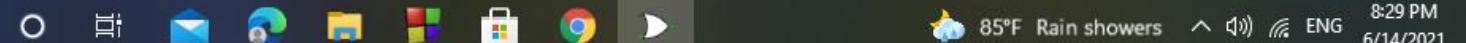


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