Experiment No.: 1

Name of the Experiment: Implement the basic logic circuit (LED)

Apparatus:

1. Breadboard

2. LED

3. Resistor

4. Battery

7. Wire

Description:

First of all, we have taken breadboard then we have taken a battery then we have planted the battery in the breadboard. After that we have connected led in the breadboard along with resistor, we have used some wired for all these connections. Finally, we have got the output on LED light.

Figures:

Implementation
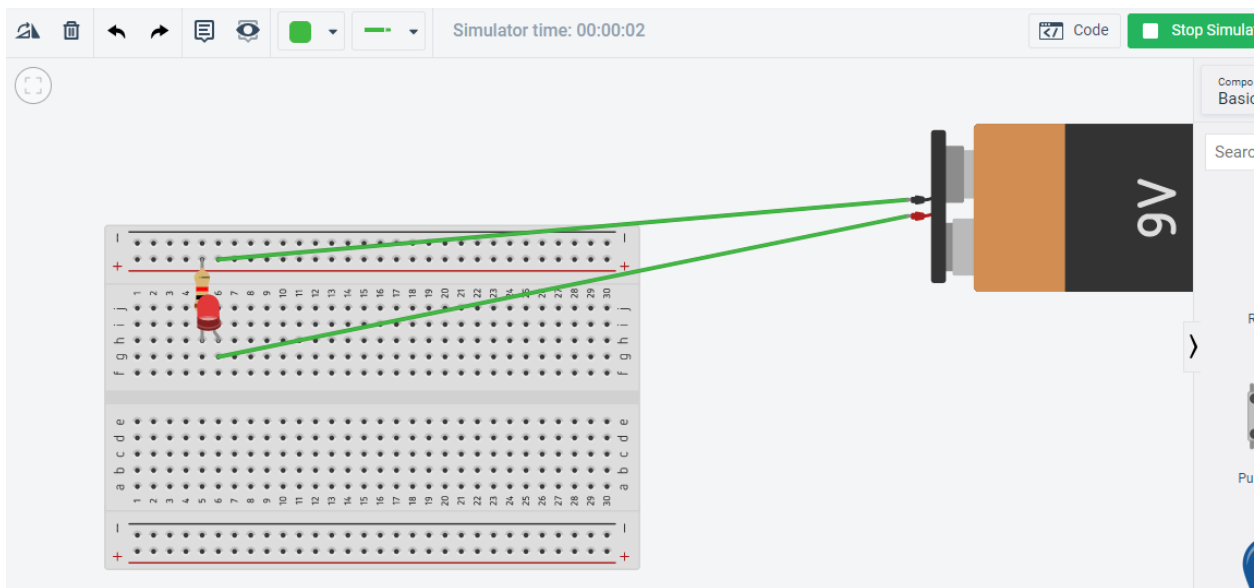
Summary:

After implementation this lab we have learned about the implementation the basic logic gate how it works. Now we can draw any complex circuit.

>>

Experiment No.: 2

Name of the Experiment: OR gate Implementation

Apparatus:

1. Breadboard

2. Bulb

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected led in the breadboard along with resistor, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the

output of the gate to the led. And we have connected all gate's 7 no pin to the ground for safety.
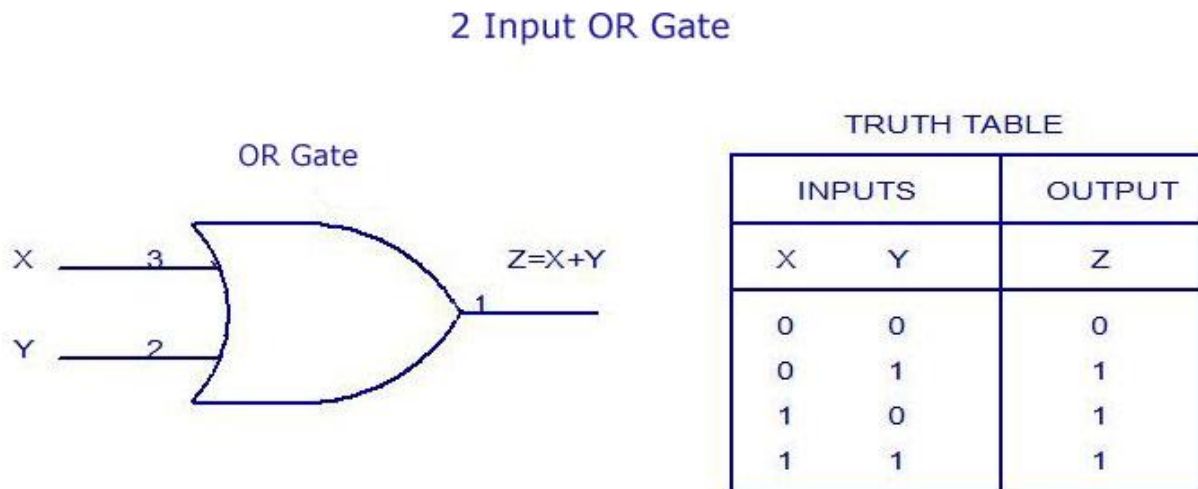
Figures:

2 Input OR Gate

OR Gate

X ___3___

Z=X+Y

Y ___2___

TRUTH TABLE

INPUTS		OUTPUT
X	Y	Z
0	0	0
0	1	1
1	0	1
1	1	1

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>>

Experiment No.: 3

Name of the Experiment: 2 OR gate implementation

Apparatus:

1. Breadboard

2. Motor / Bulb

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire.

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected motor in the breadboard along with resistor, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to the motor. And we have connected all gate's 7 no pin to the ground for safety.
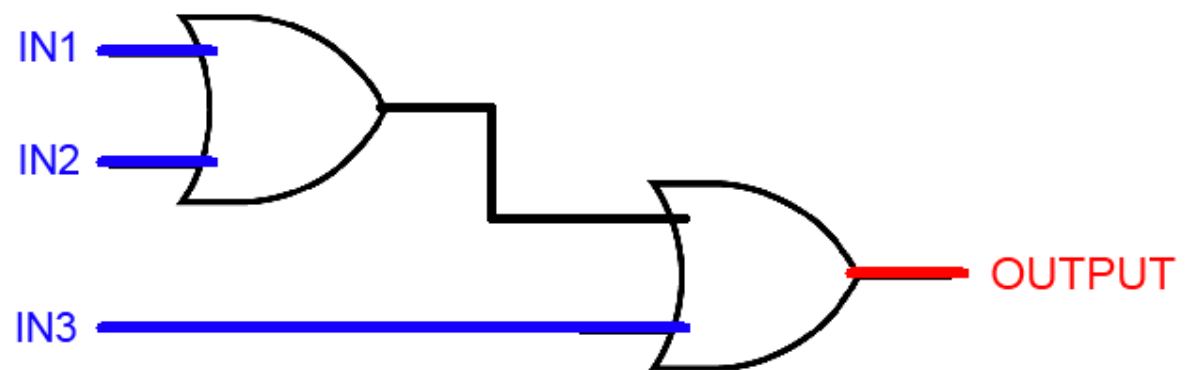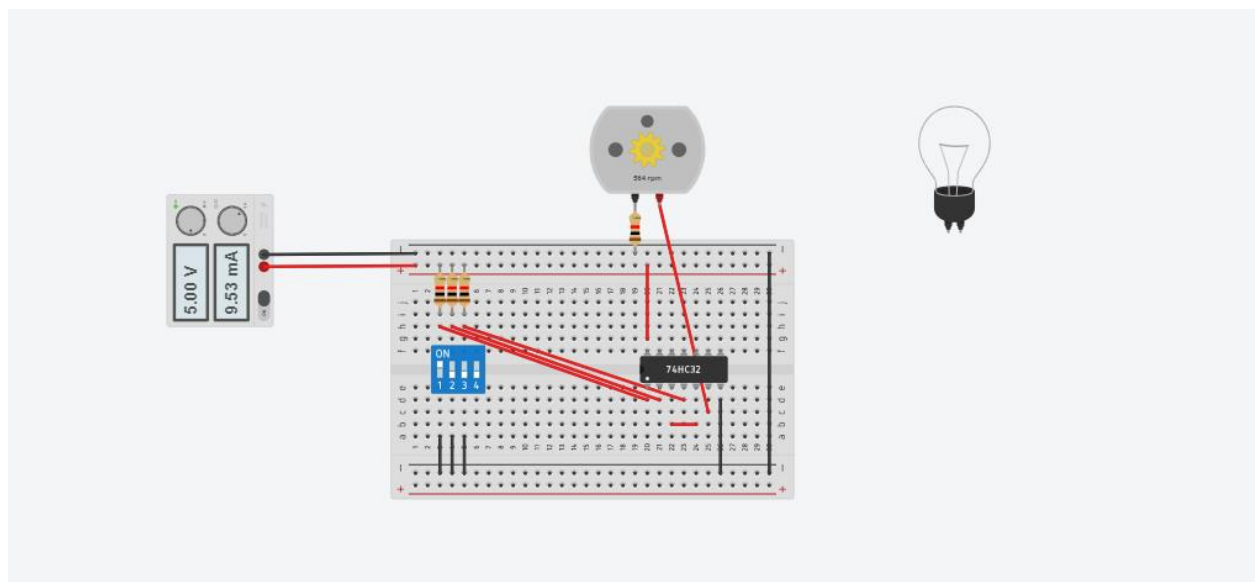
Figures:

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>

Experiment No.: 4

Name of the Experiment: Implementation of Half adder

Apparatus:

1. Breadboard

2. Bulb

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected light in the breadboard along with resistor, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to the bulb. And we have connected all gate's 7 no pin to the ground for safety.
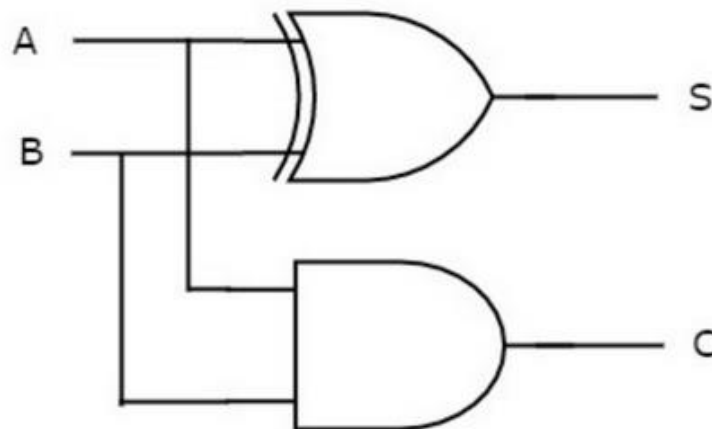
Figures:
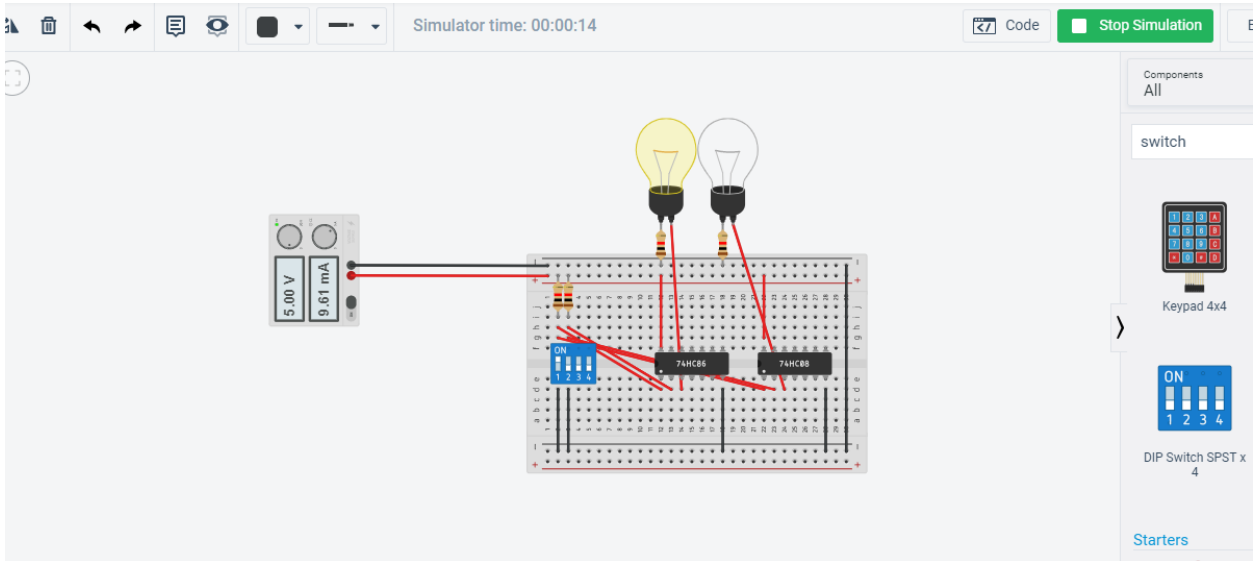

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>

Experiment No.: 5

Name of the Experiment: Implementation of Full Adder.

Apparatus:

1. Breadboard

2. Bulb

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected light in the breadboard along with resistor, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to the bulb. And we have connected all gate's 7 no pin to the ground for safety.
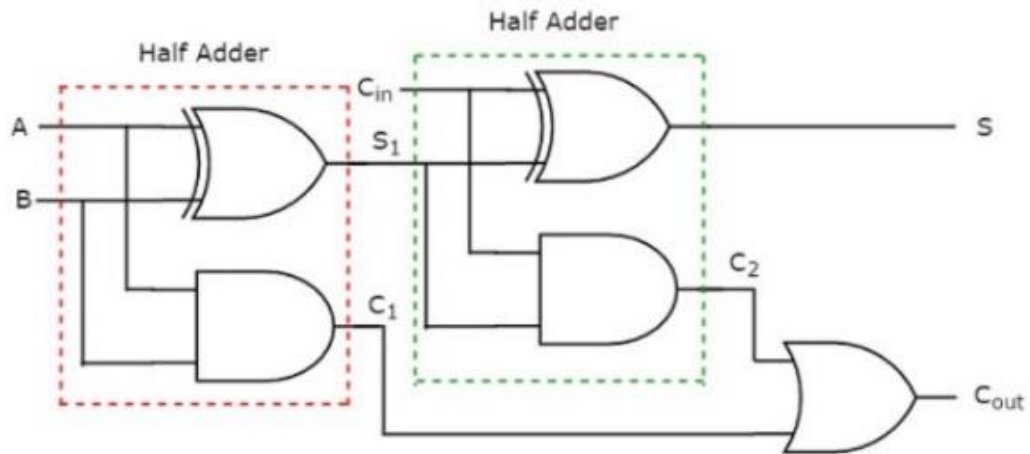
Figures:

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>>

Experiment No.: 6

Name of the Experiment: Implementation of Decoder.

Apparatus:

1. Breadboard

2. LED

3. Logic Gates

4. Power Supply

5. Switch

6. Wire

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected led in the breadboard, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to the led. And we have connected all gate's 7 no pin to the ground for safety.
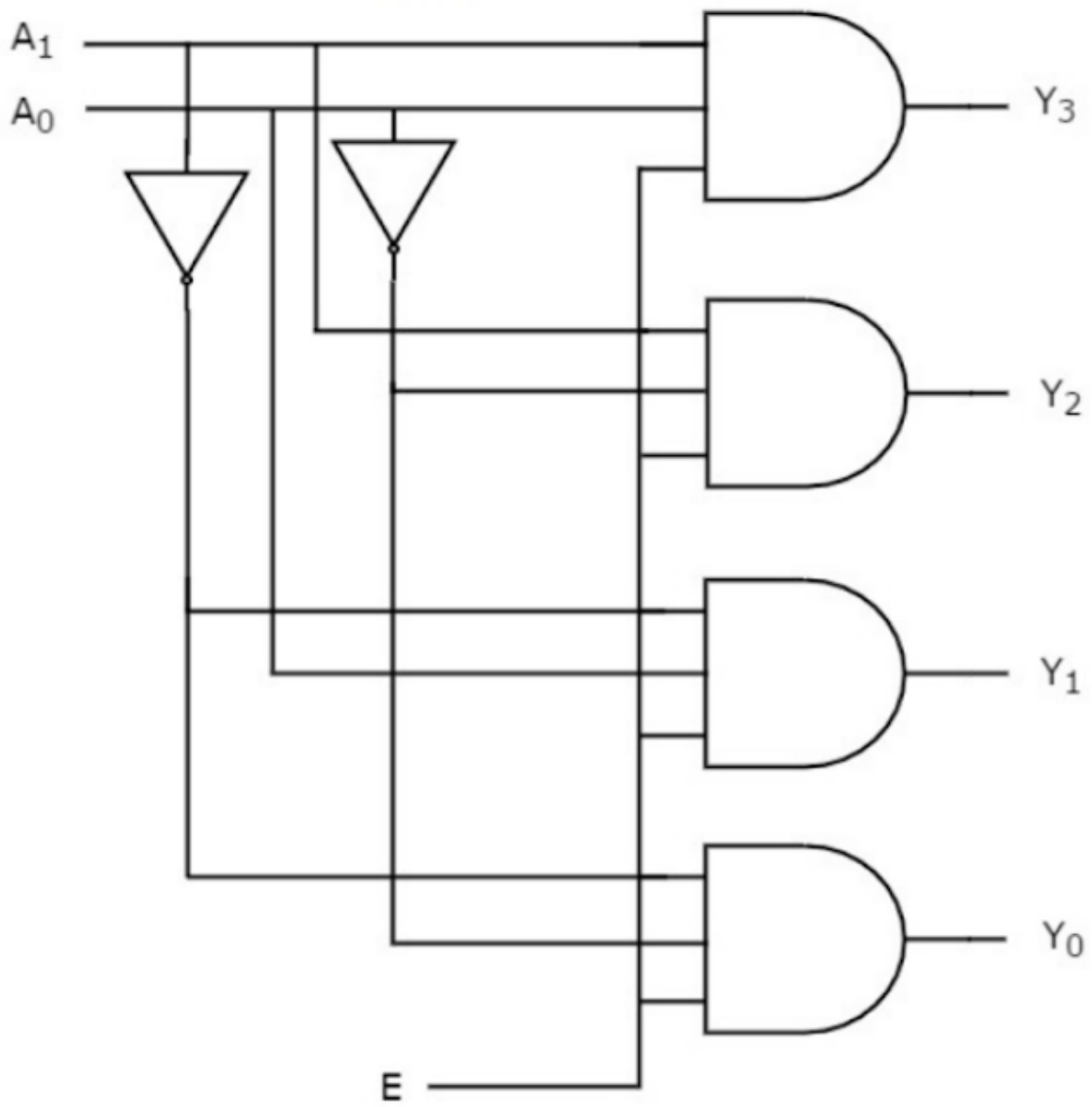
Figures:

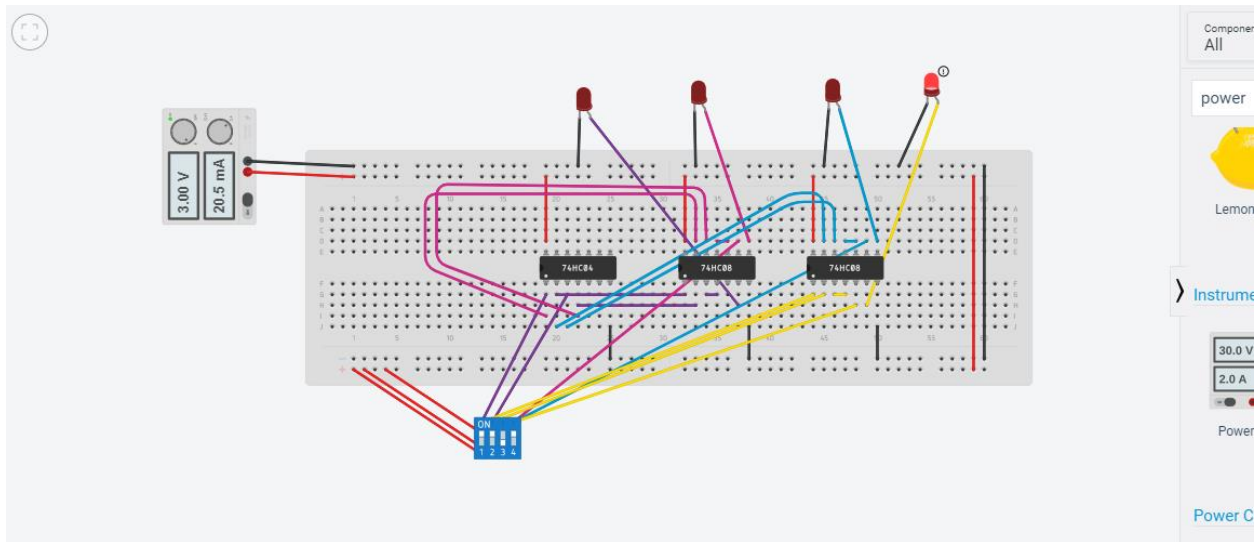**Figure 1**

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>>

Experiment No.: 7

Name of the Experiment: Implementation of Encoder.

Apparatus:

1. Breadboard

2. Bulb

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire.

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected light in the breadboard along with resistor, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to the bulb. And we have connected all gate's 7 no pin to the ground for safety.
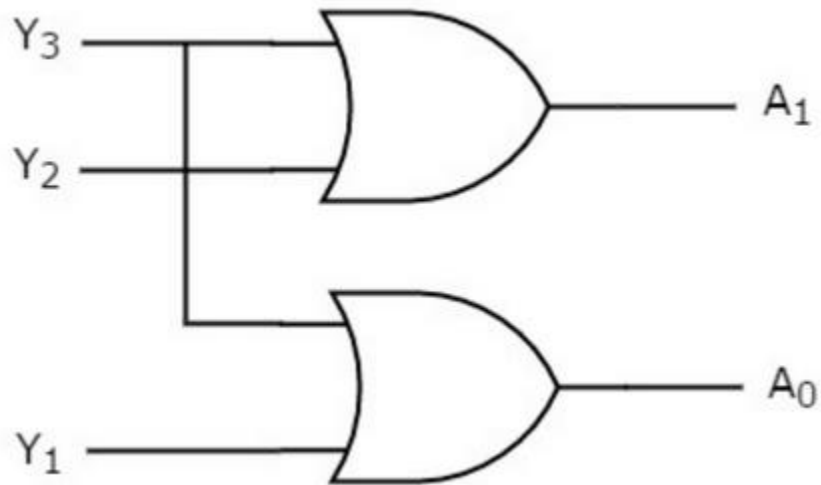
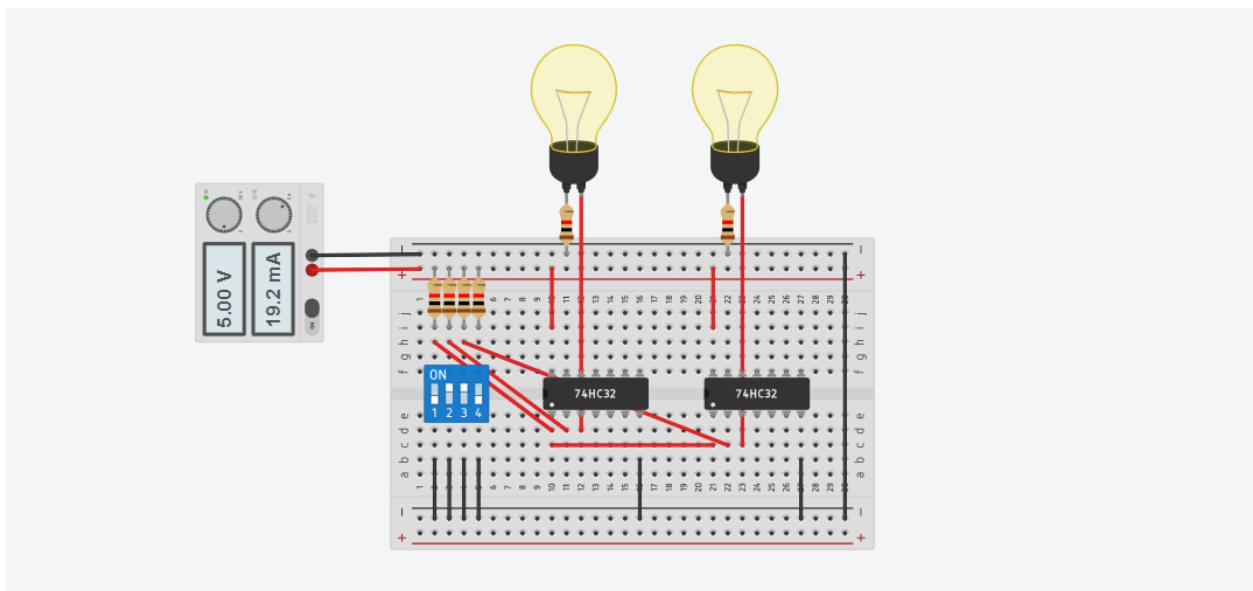**Figures:**

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

>>>

Experiment No.: 8

Name of the Experiment: Implementation of Multiplexer

Apparatus:

1. Breadboard

2. LED

3. Logic Gates

4. Power Supply

5. Resistor

6. Switch

7. Wire

Description:

First of all, we have taken breadboard then we have taken a power supply then we have planted the power supply in the breadboard then we have plant the gates in the breadboard after that we have connected led in the breadboard, we have used some wired for all these connections. After that, we have planted a switch in the breadboard. Then, we have connected switch with gates. Then we have forwarded the output of the gate to theled. And we have connected all gate's 7 no pin to the ground for safety.
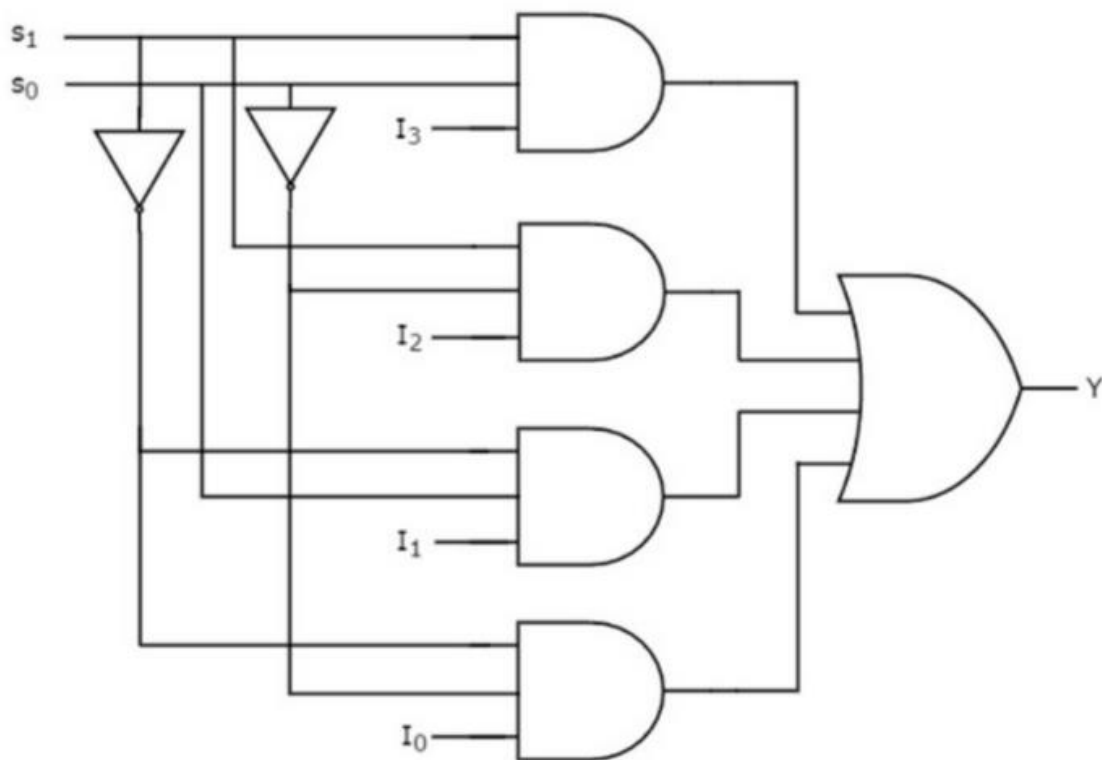
Figures:
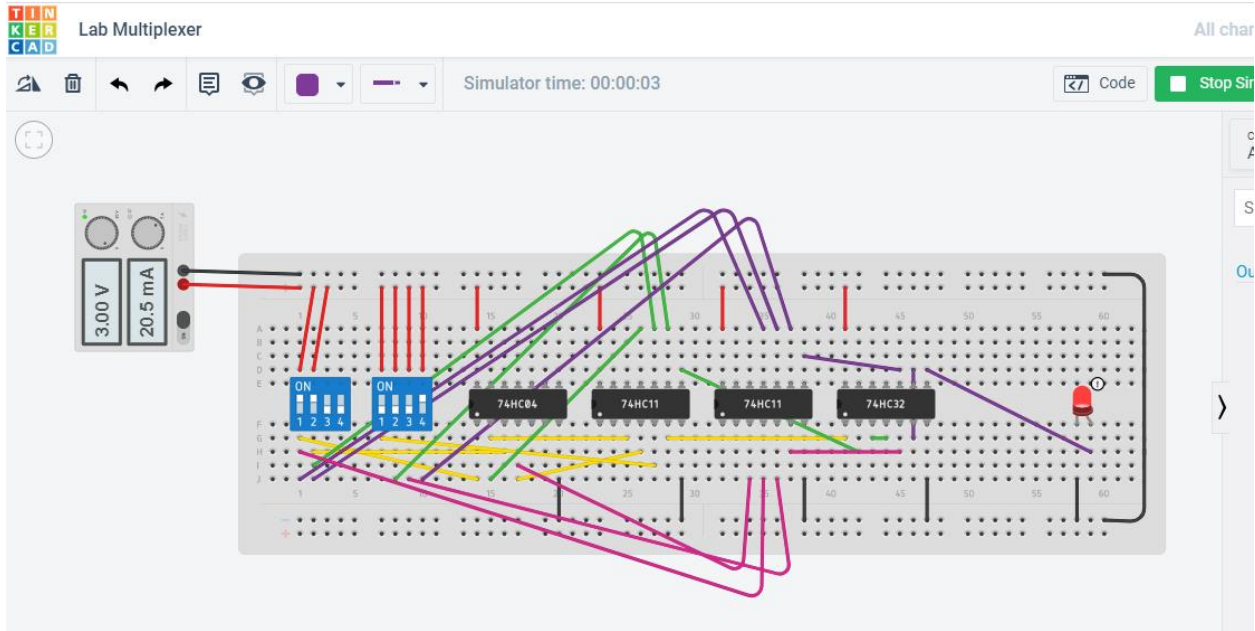

Figure 1

Implementation

Figure 2

Summary:

After implementation this lab we have learned about gate's connections and also know how it works. Now we can draw any circuit.

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>>>>>>>>>>>>>>>>>>>>>>>>>>>>