ENGR 101
Engineering Technology

A/Prof. Pawel Dmochowski

School of Engineering and Computer Science
Victoria University of Wellington

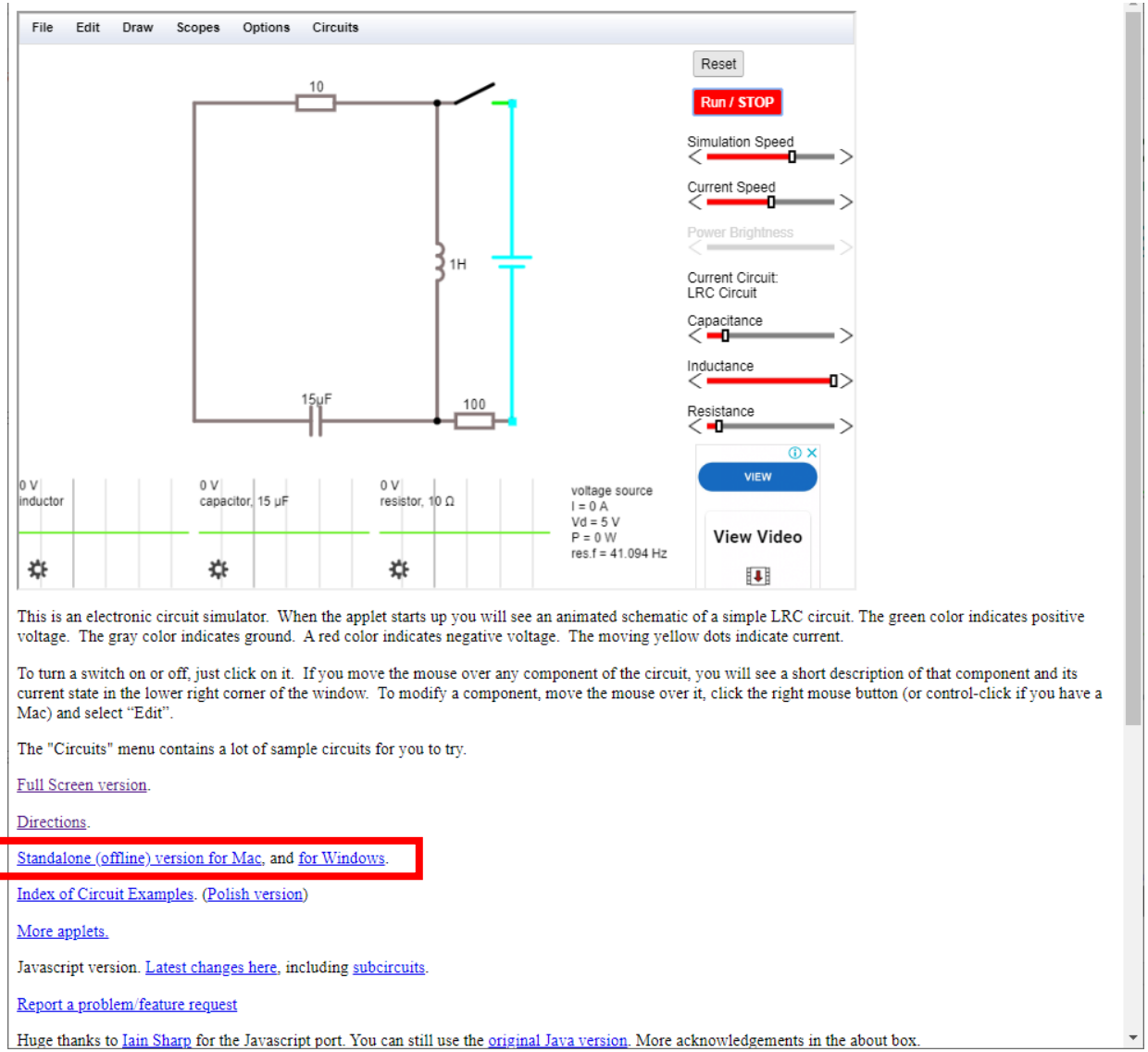
Week 15

- Circuit simulator

  https://www.falstad.com/circuit/

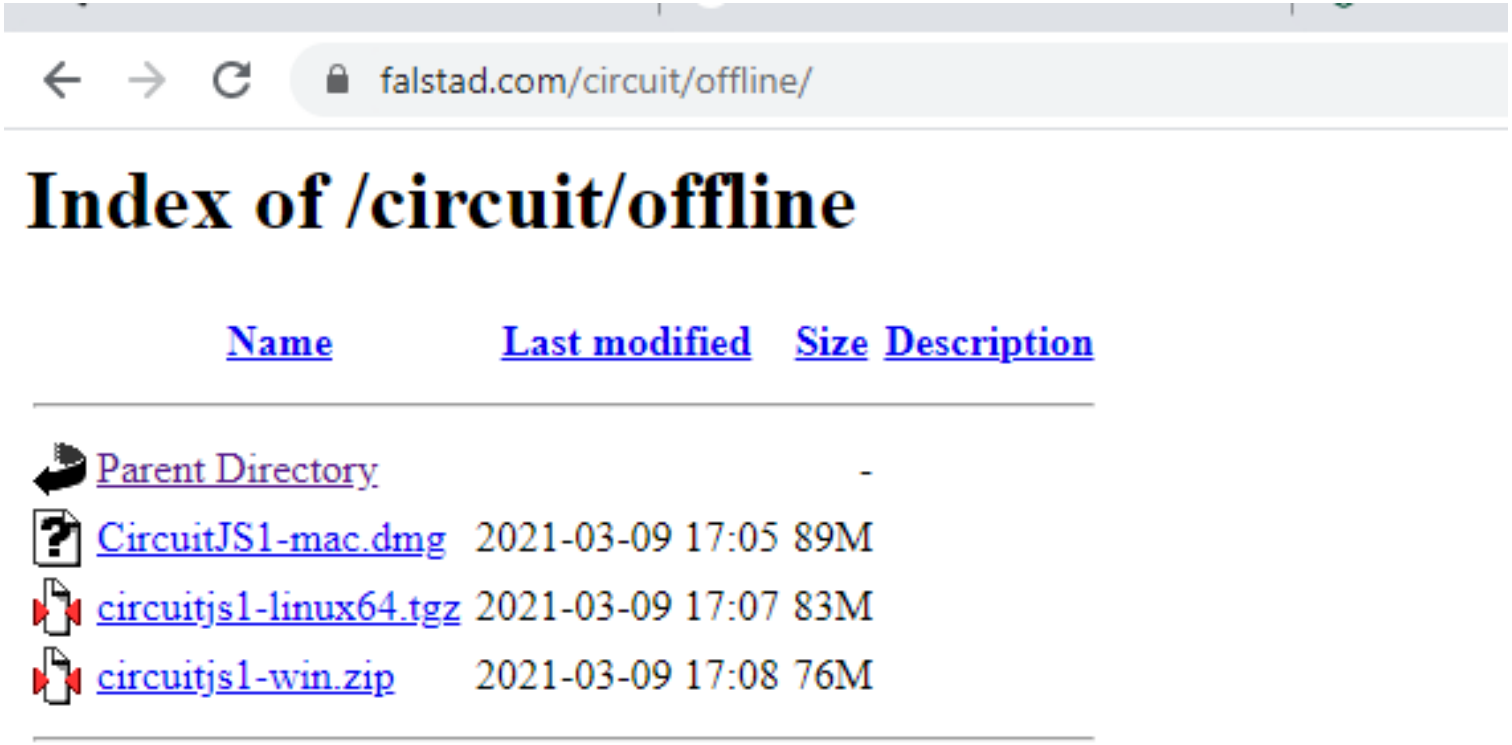
Drawing Logic Circuits using on-line simulator

https://www.falstad.com/circuit/



Standalone version

https://www.falstad.com/circuit/



Standalone versions

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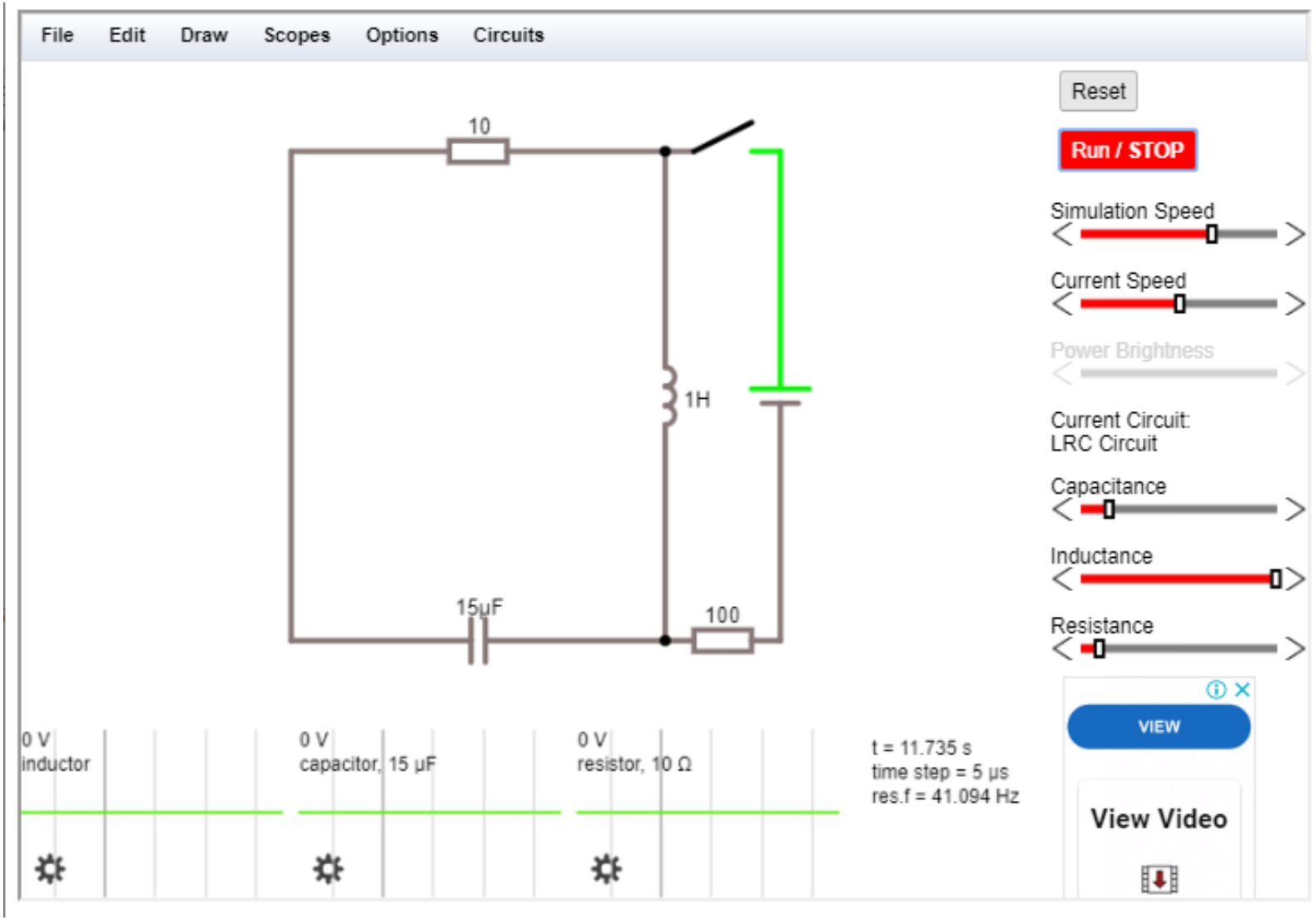

Drawing Logic Circuits using on-line simulator

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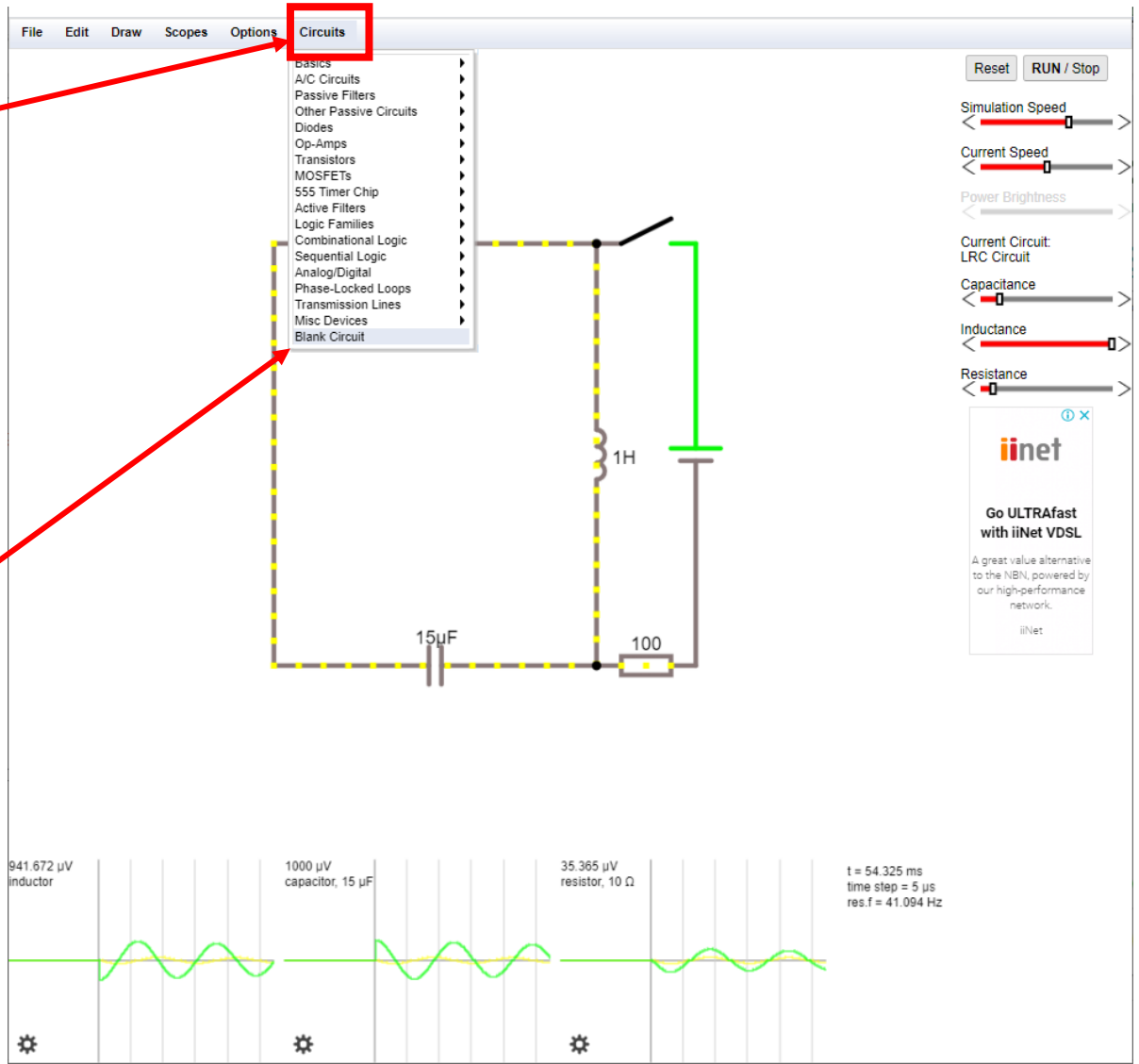
1. Click on the Circuits drop-down menu

2. Click on the Blank Circuit option



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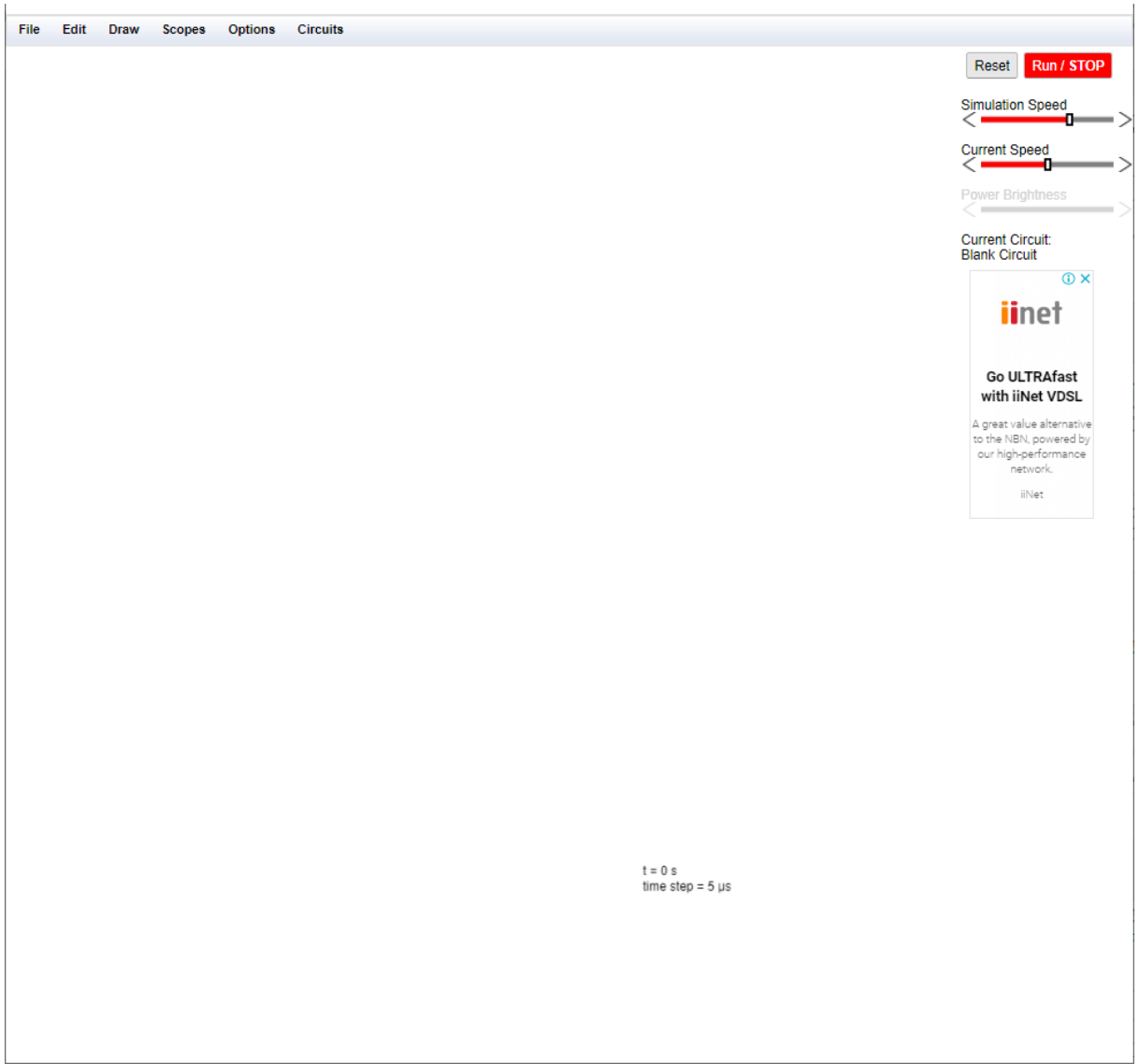

Drawing Logic Circuits using on-line simulator

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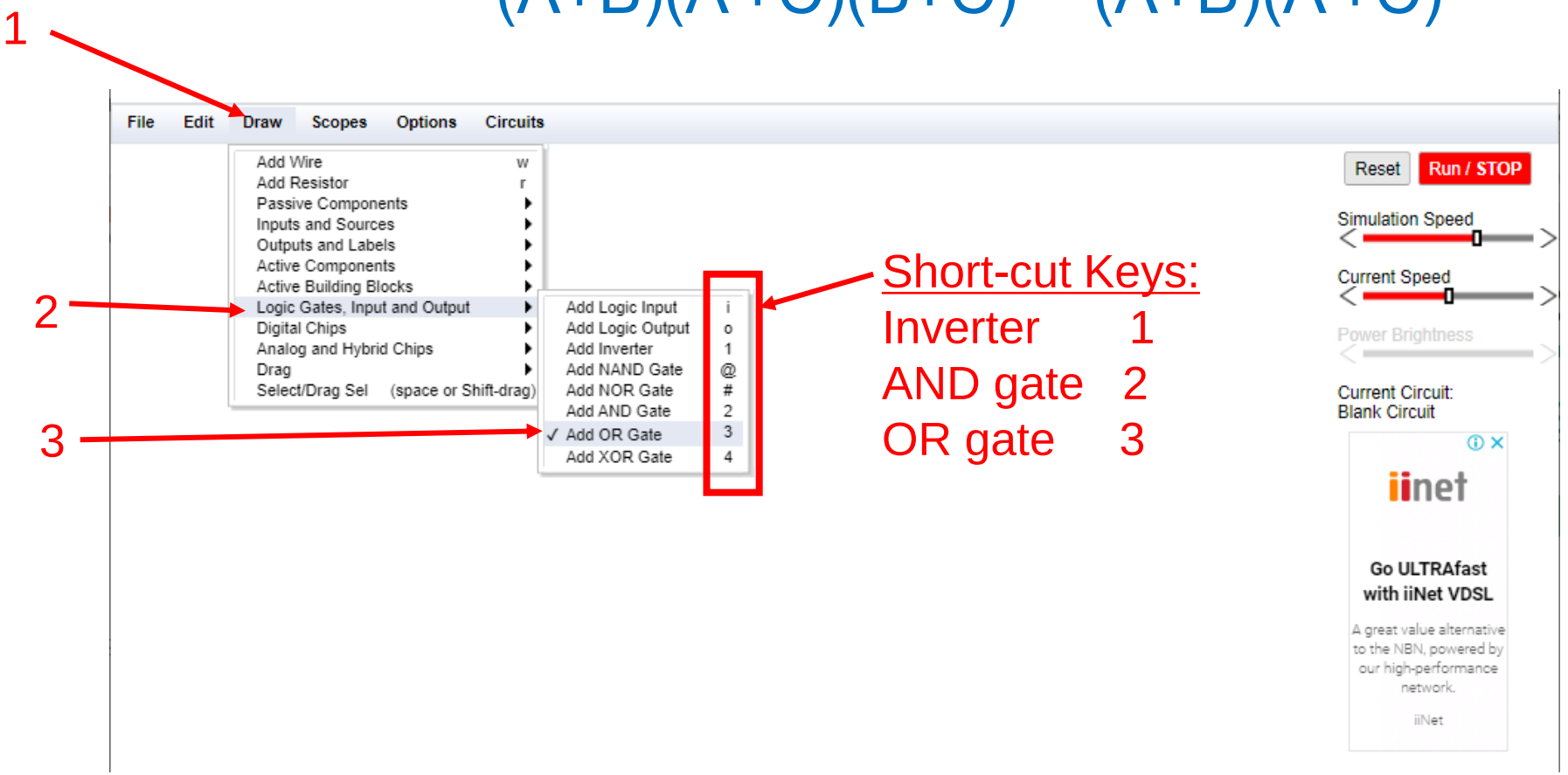

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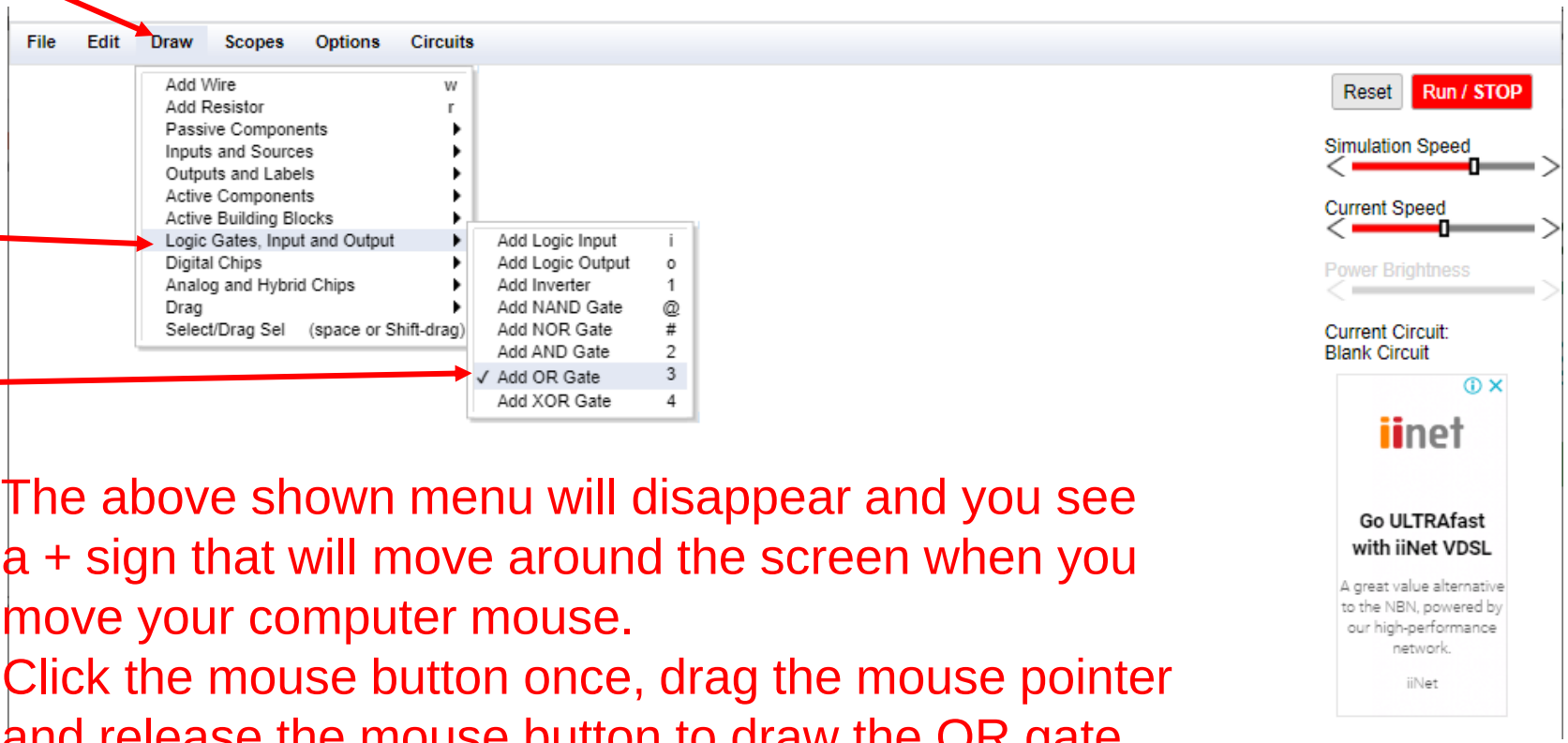

4. The above shown menu will disappear and you see a + sign that will move around the screen when you move your computer mouse.
5. Click the mouse button once, drag the mouse pointer and release the mouse button to draw the OR gate

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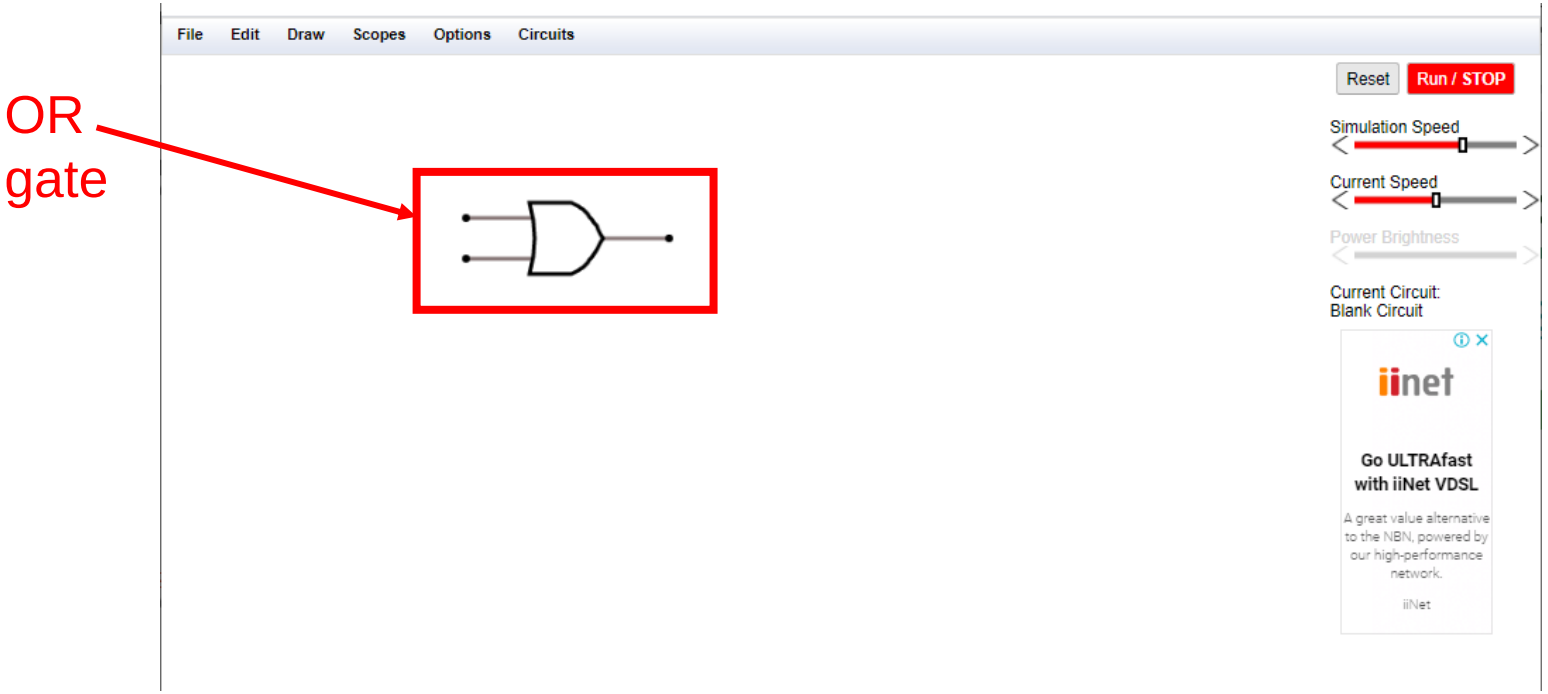

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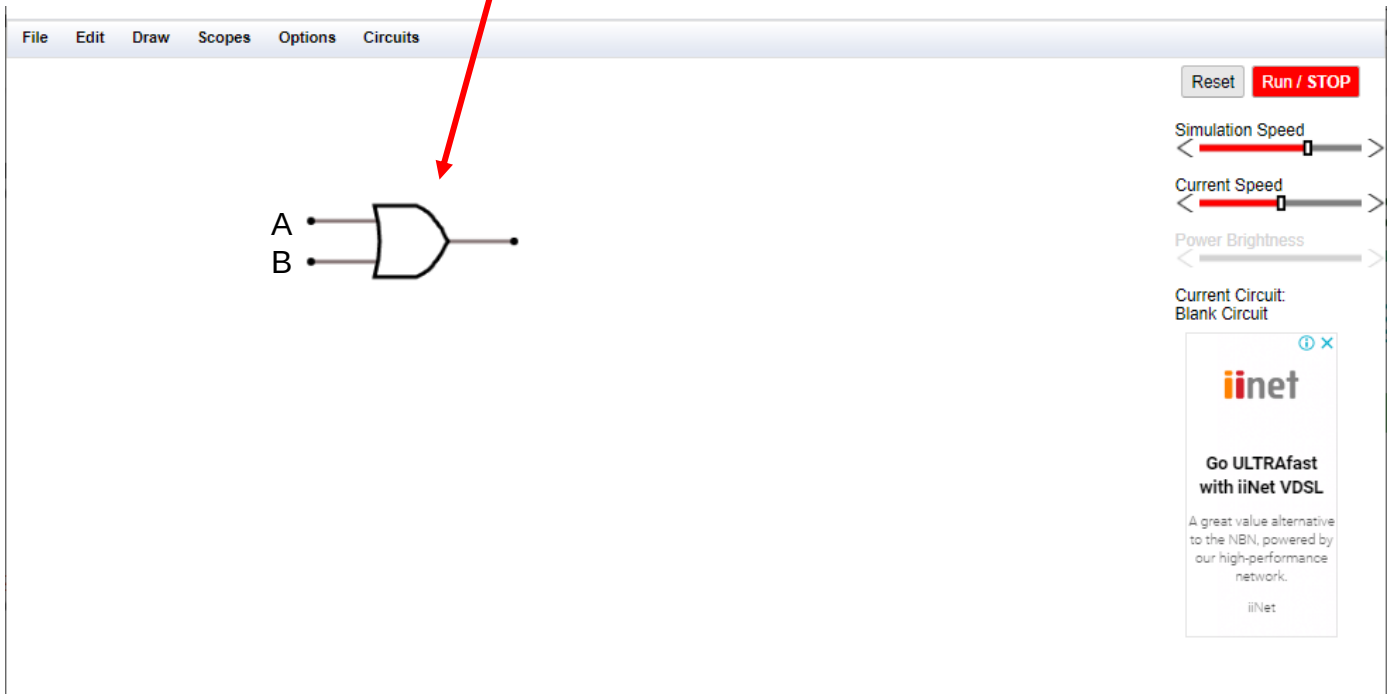

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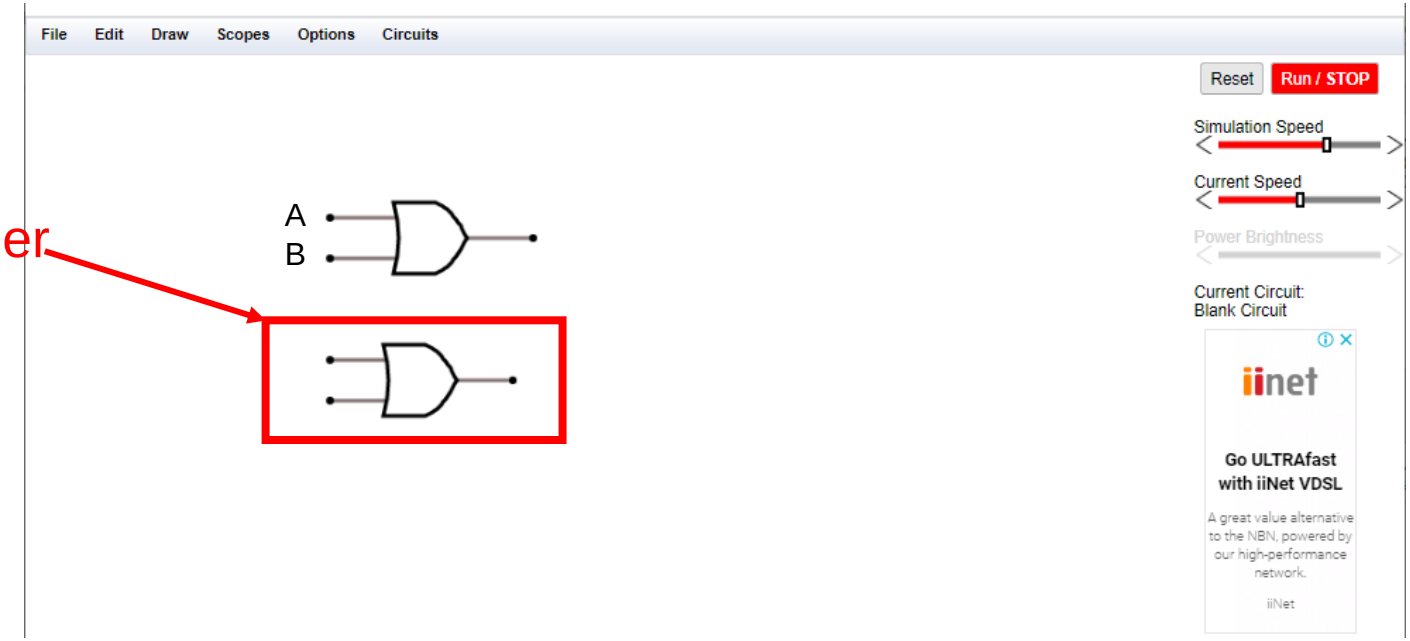
Add another OR gate



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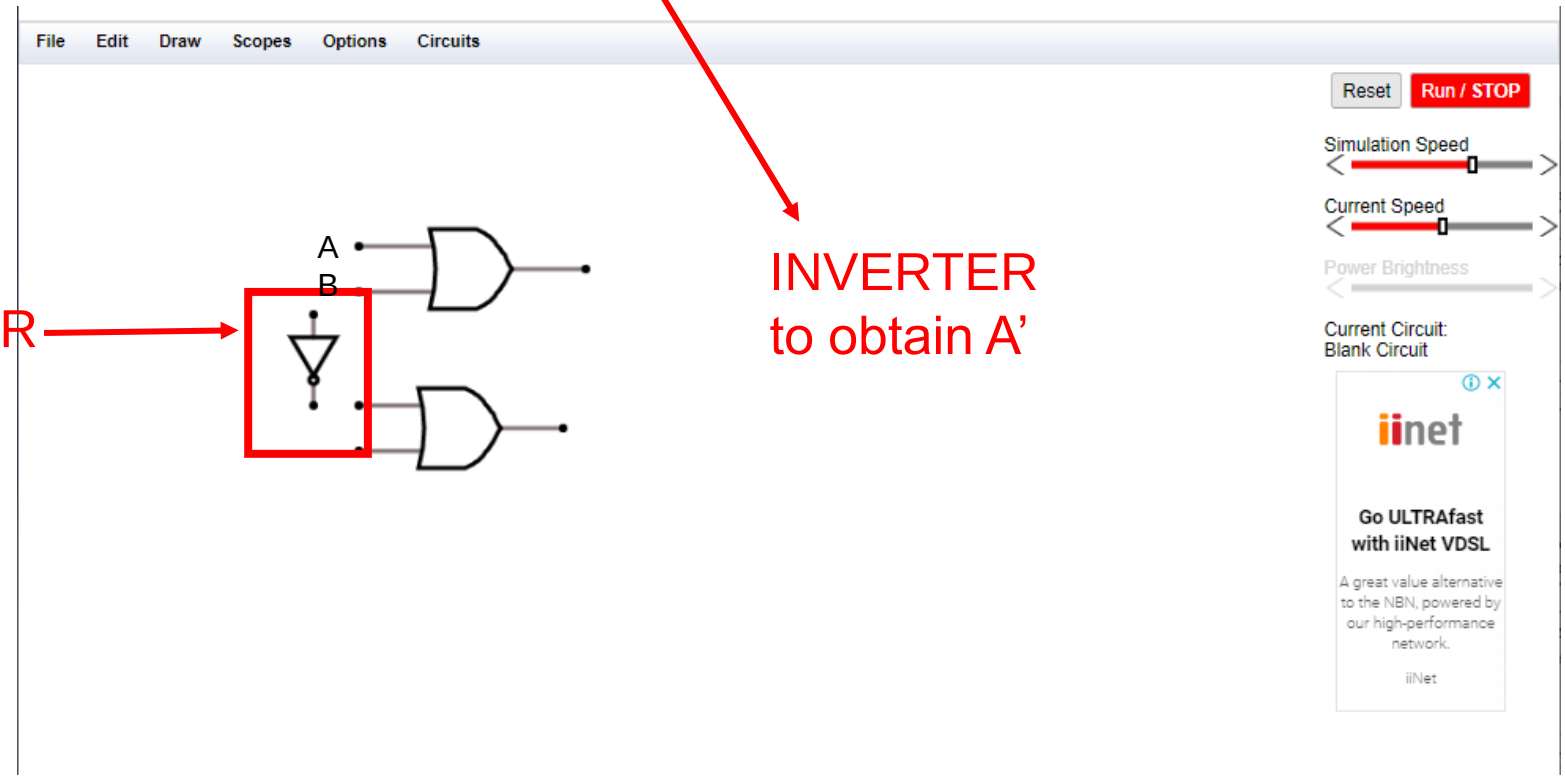
Add an INVERTER

INVERTER to obtain A'



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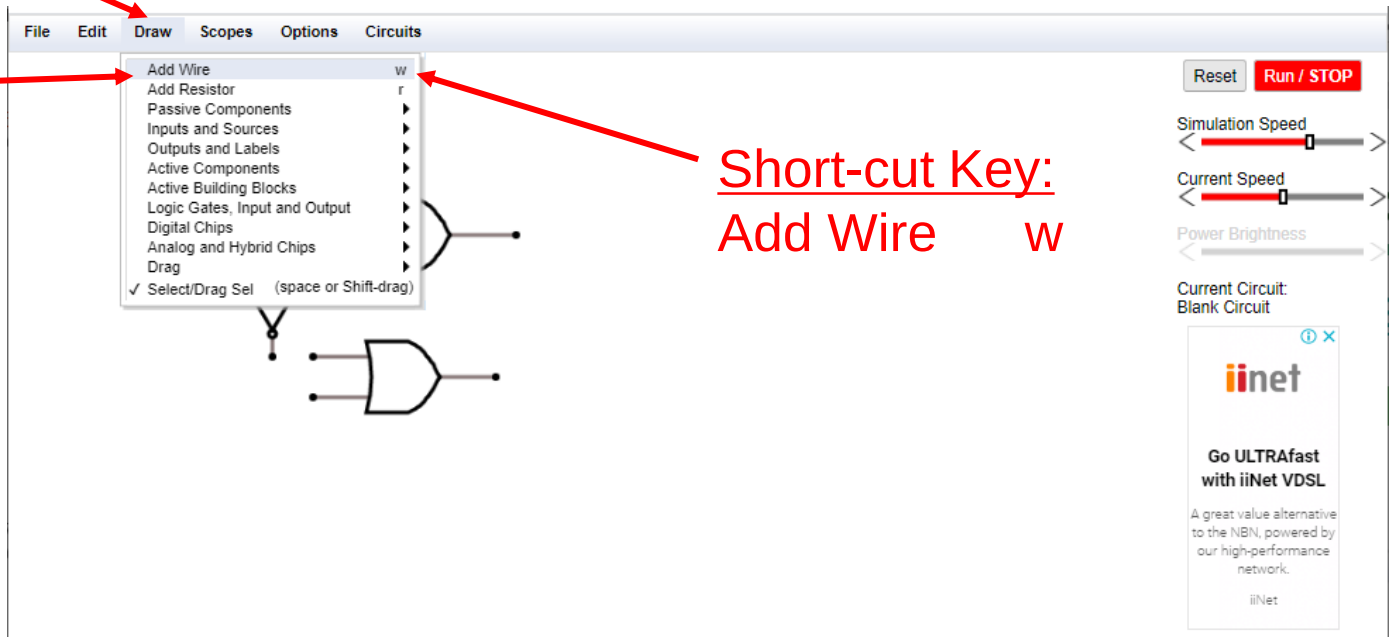

Short-cut Key:
Add Wire w

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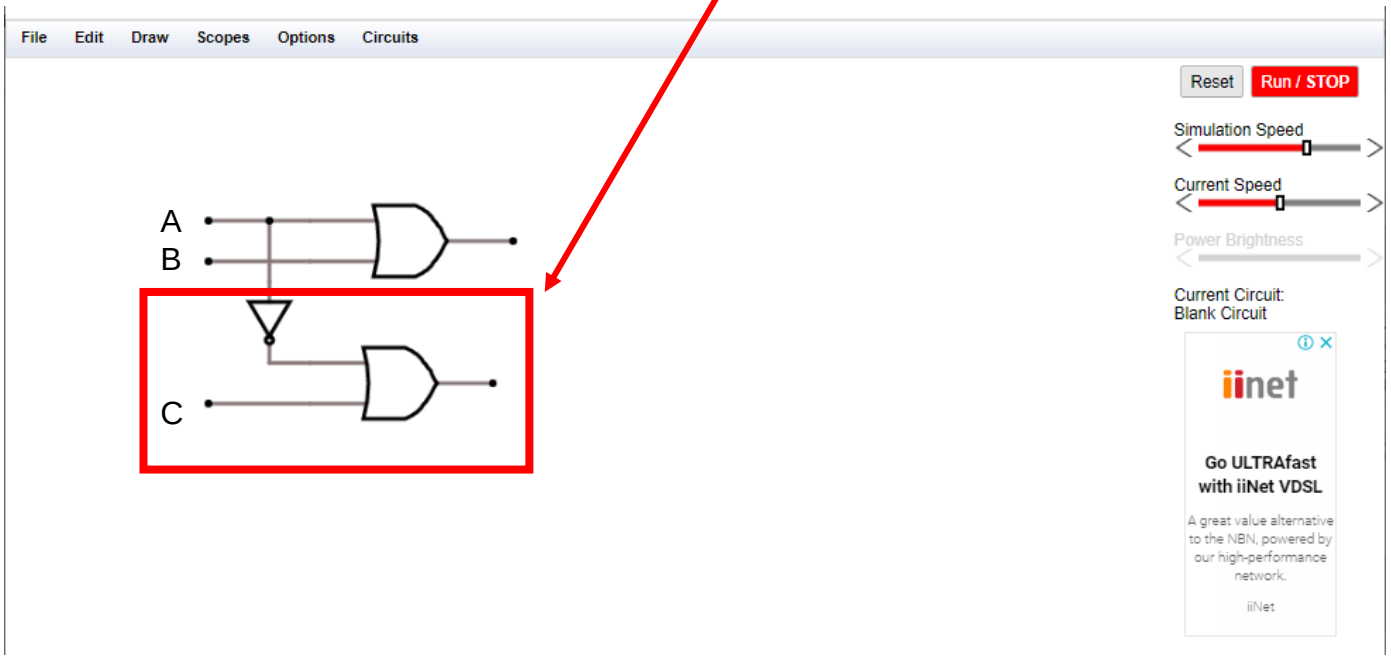

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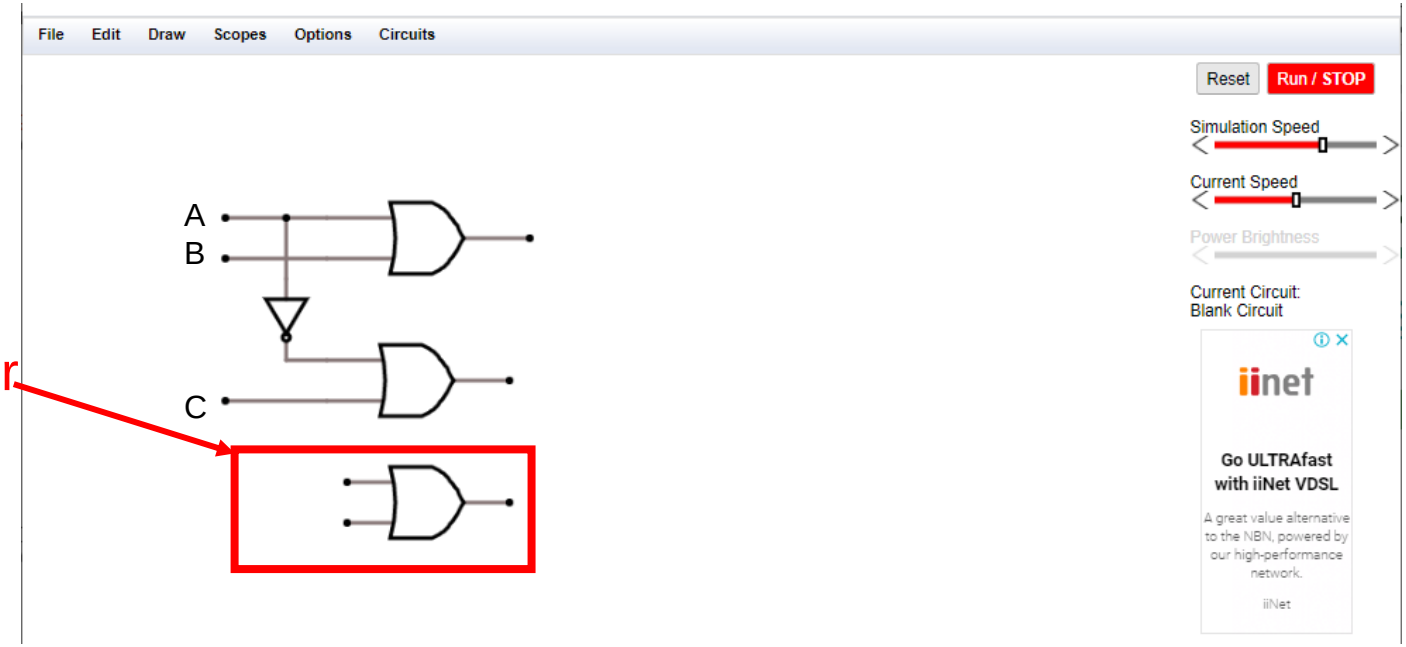

Add another OR gate

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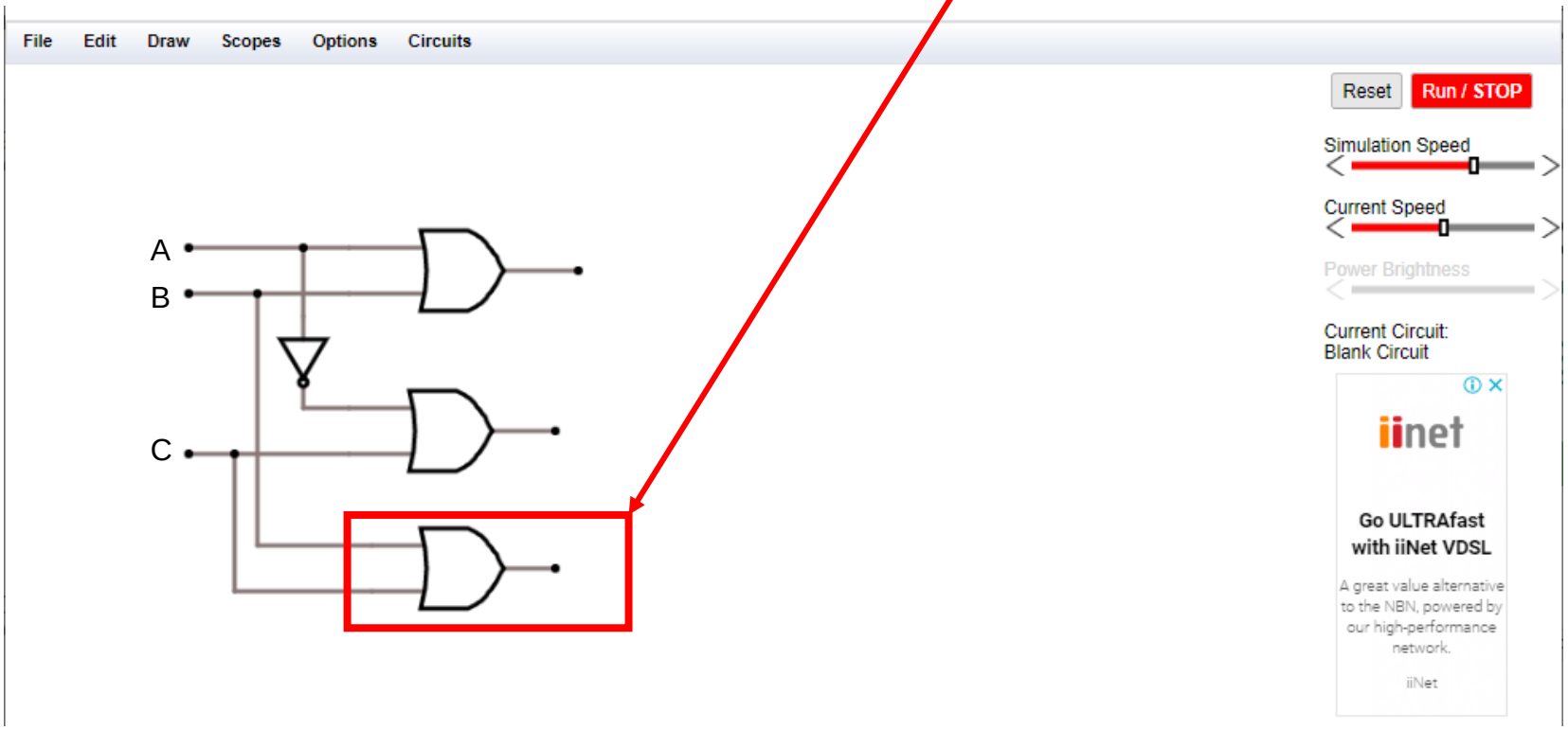

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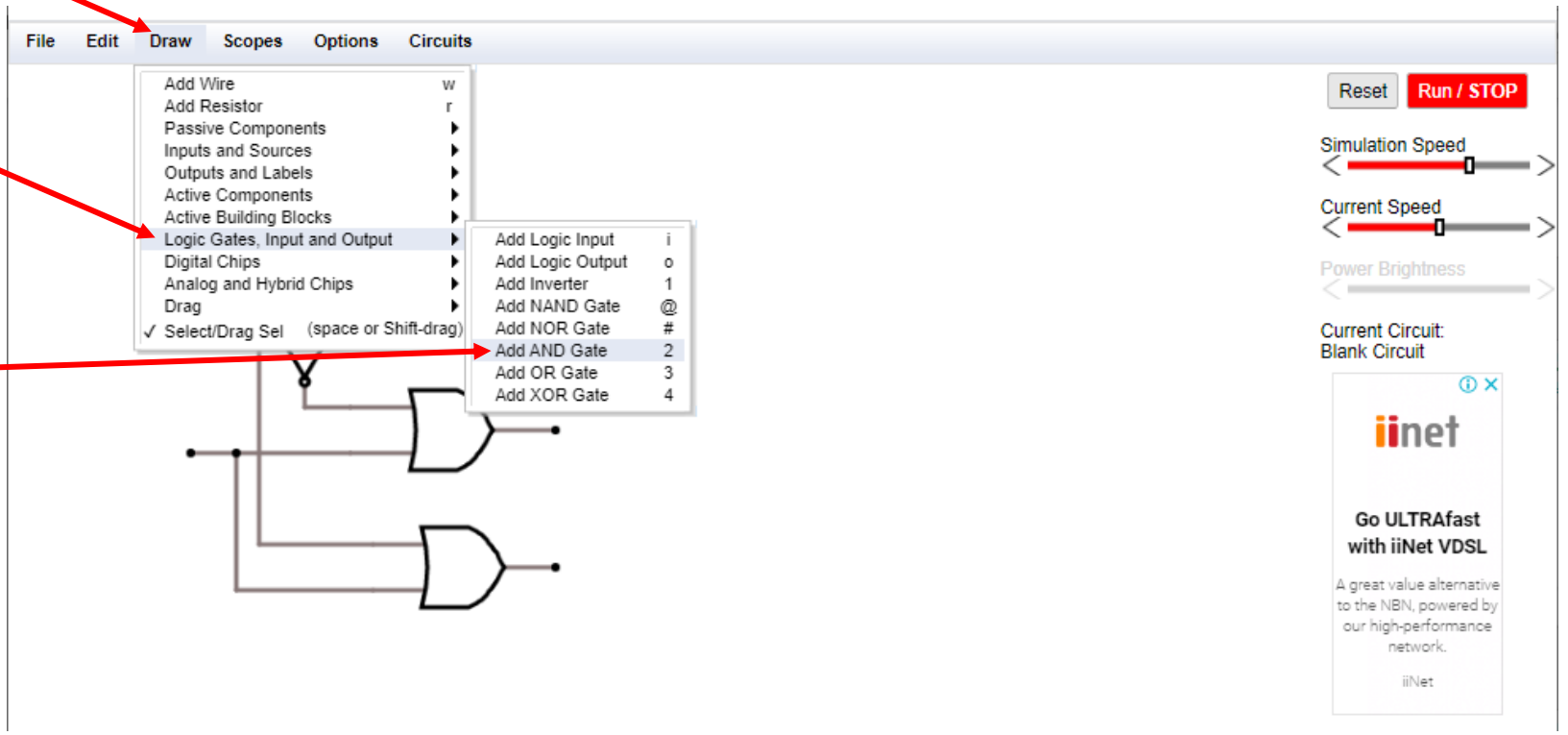

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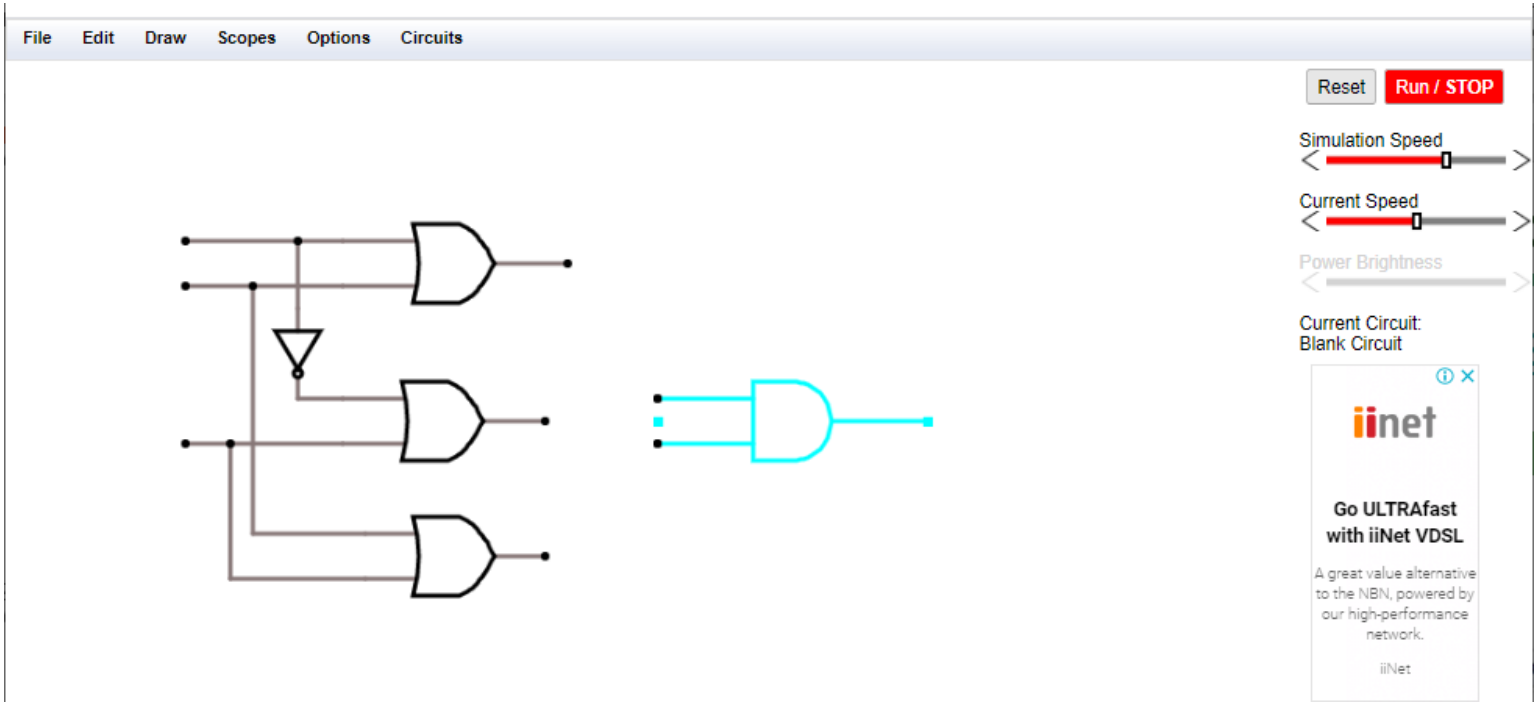

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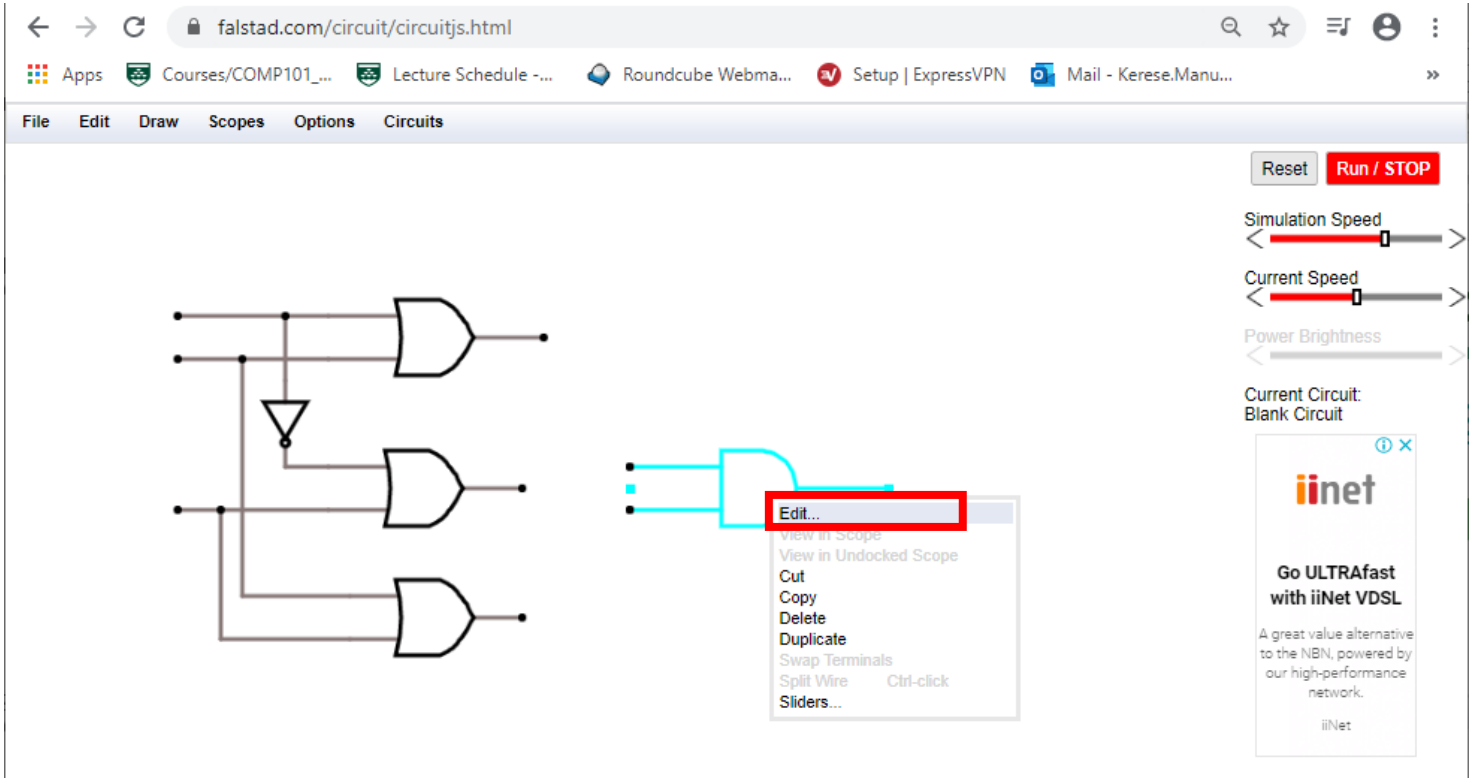

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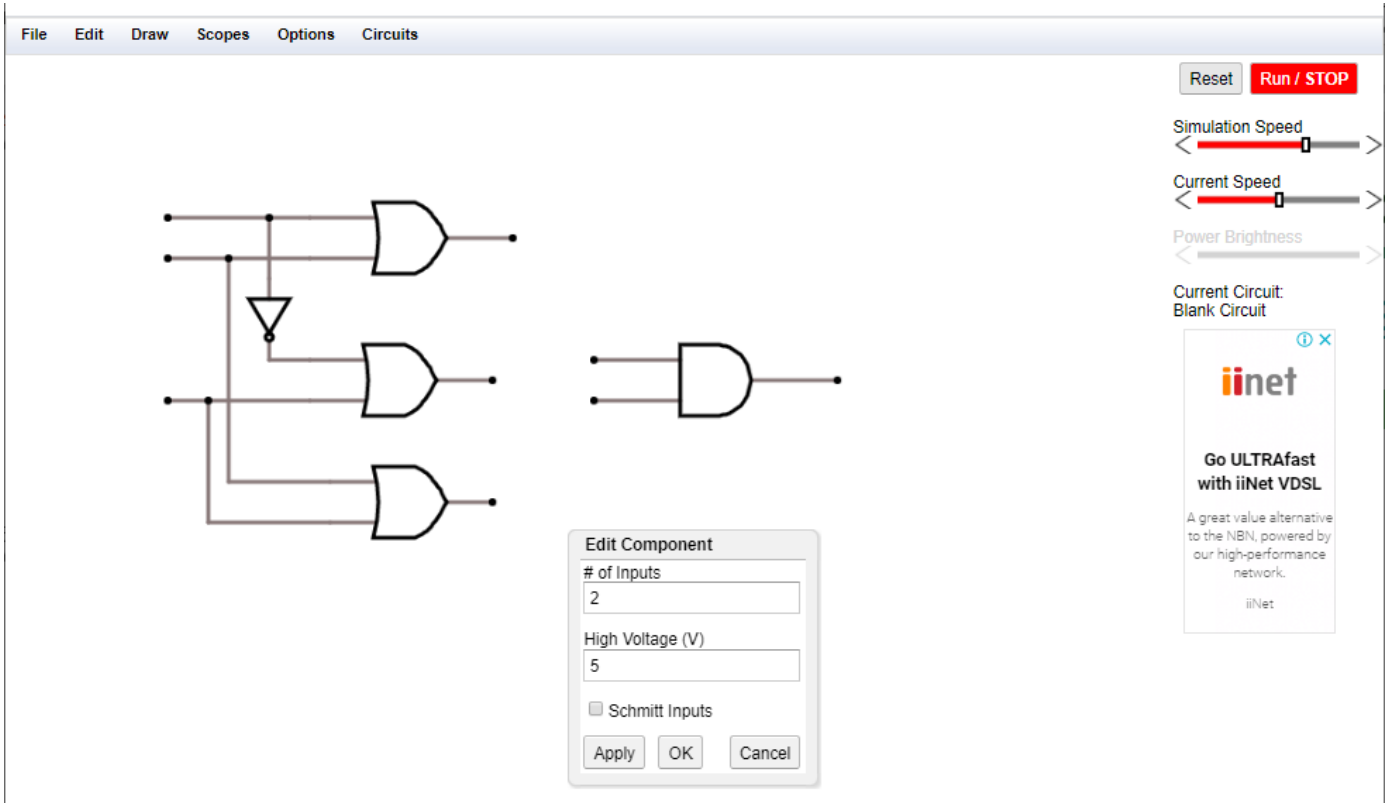

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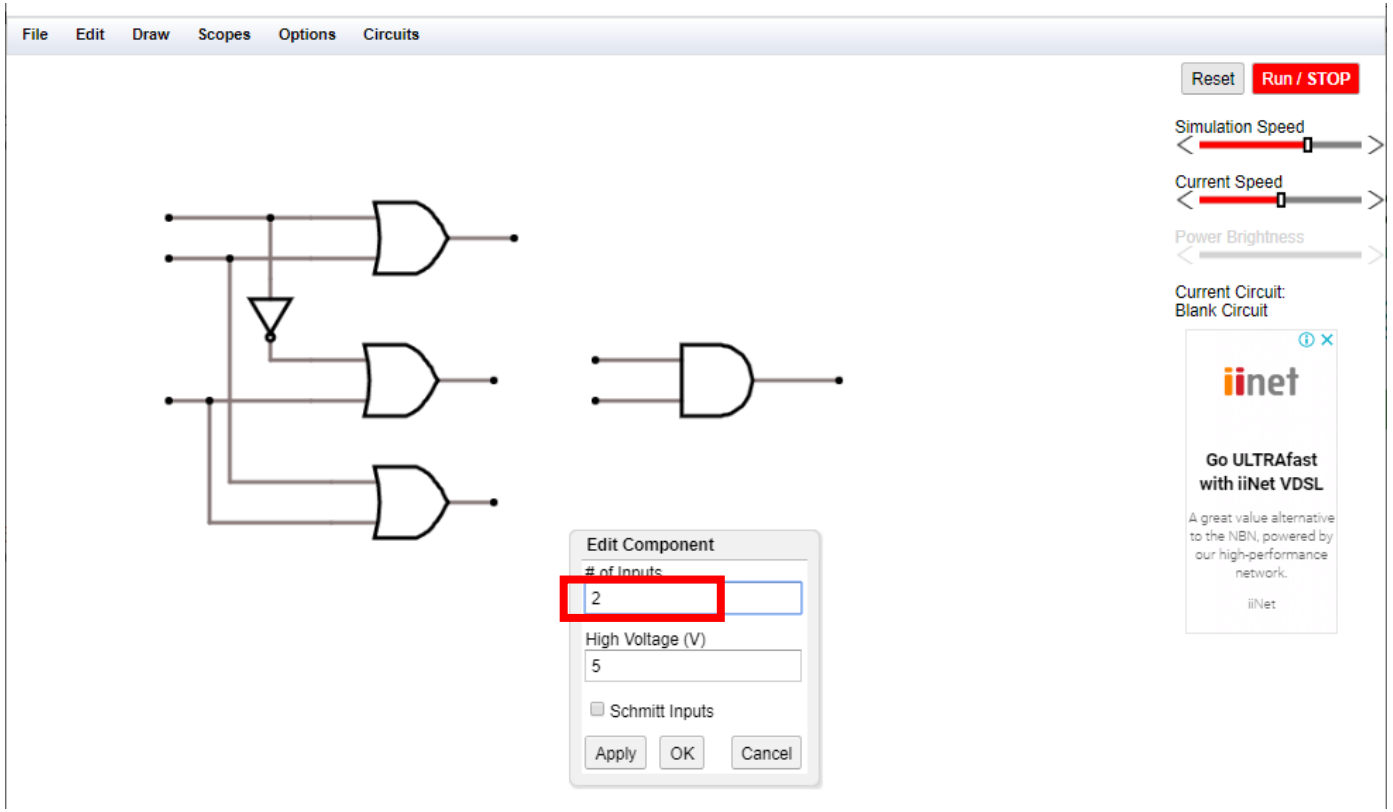

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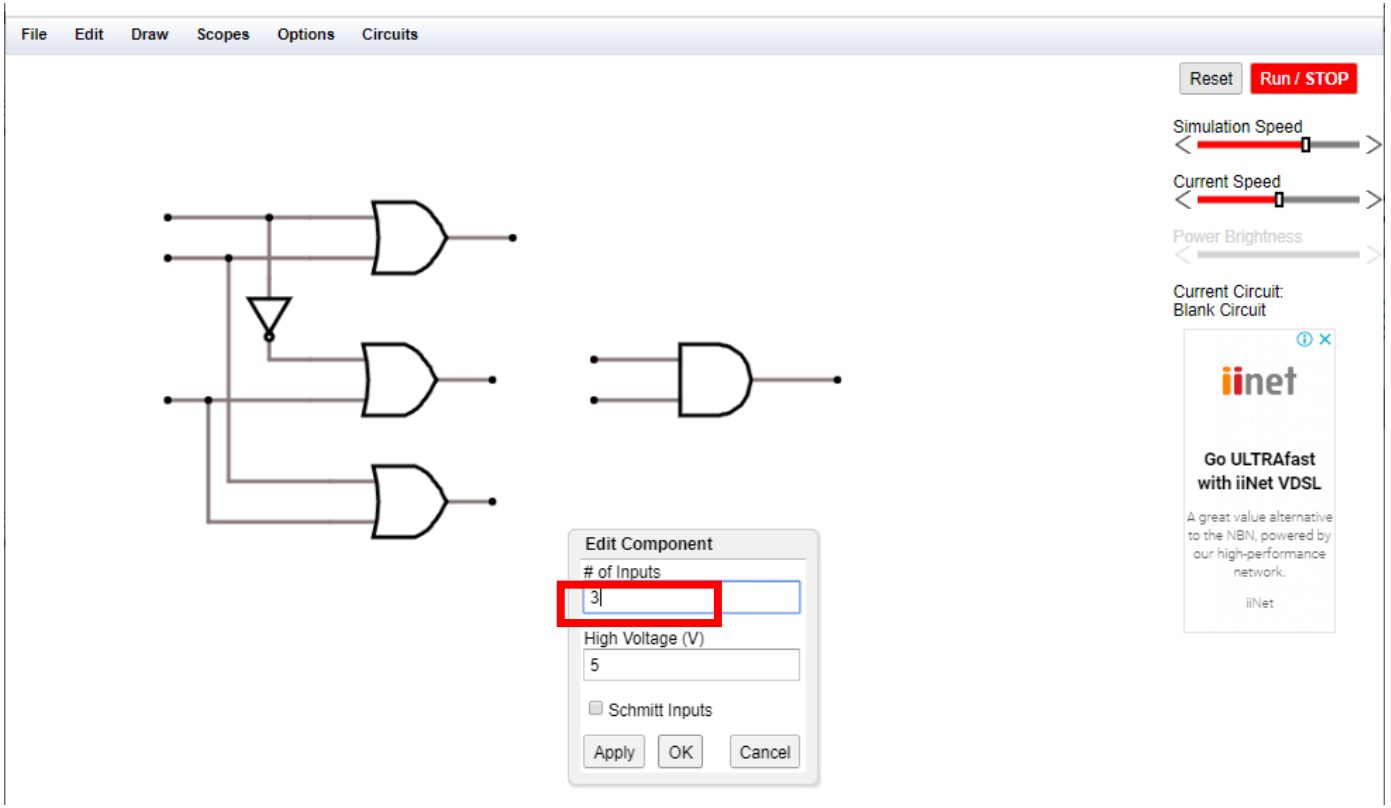

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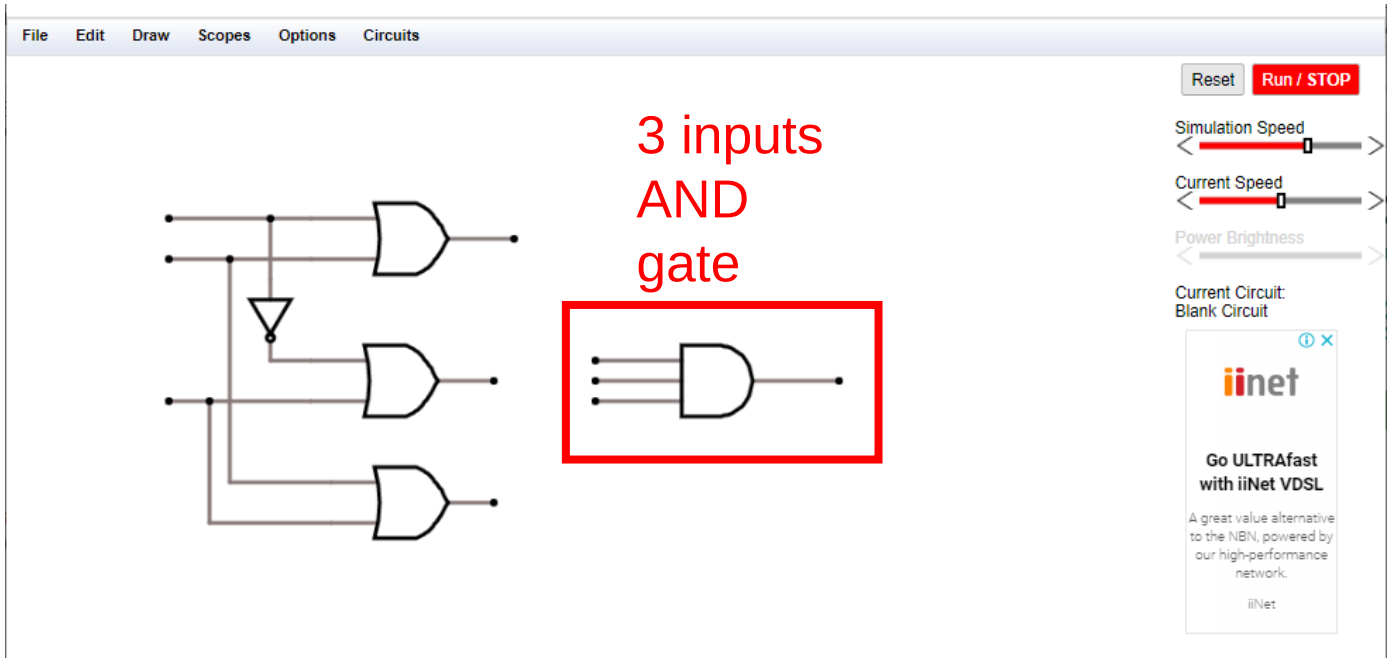

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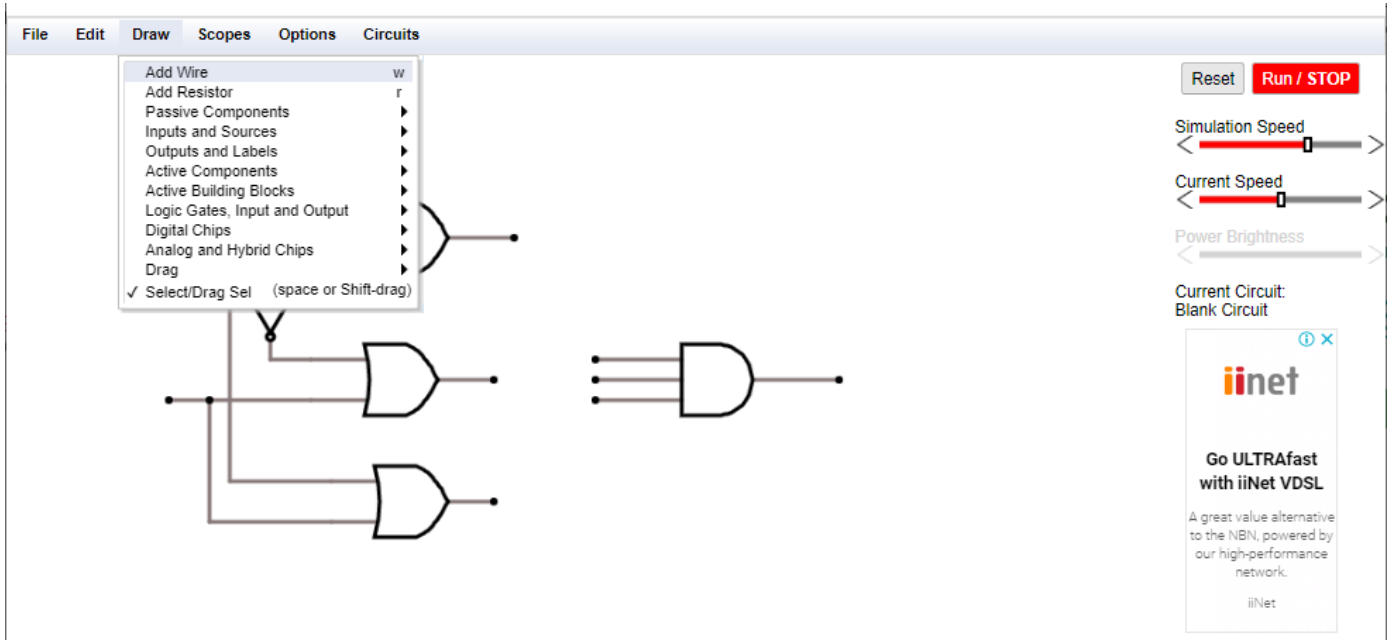

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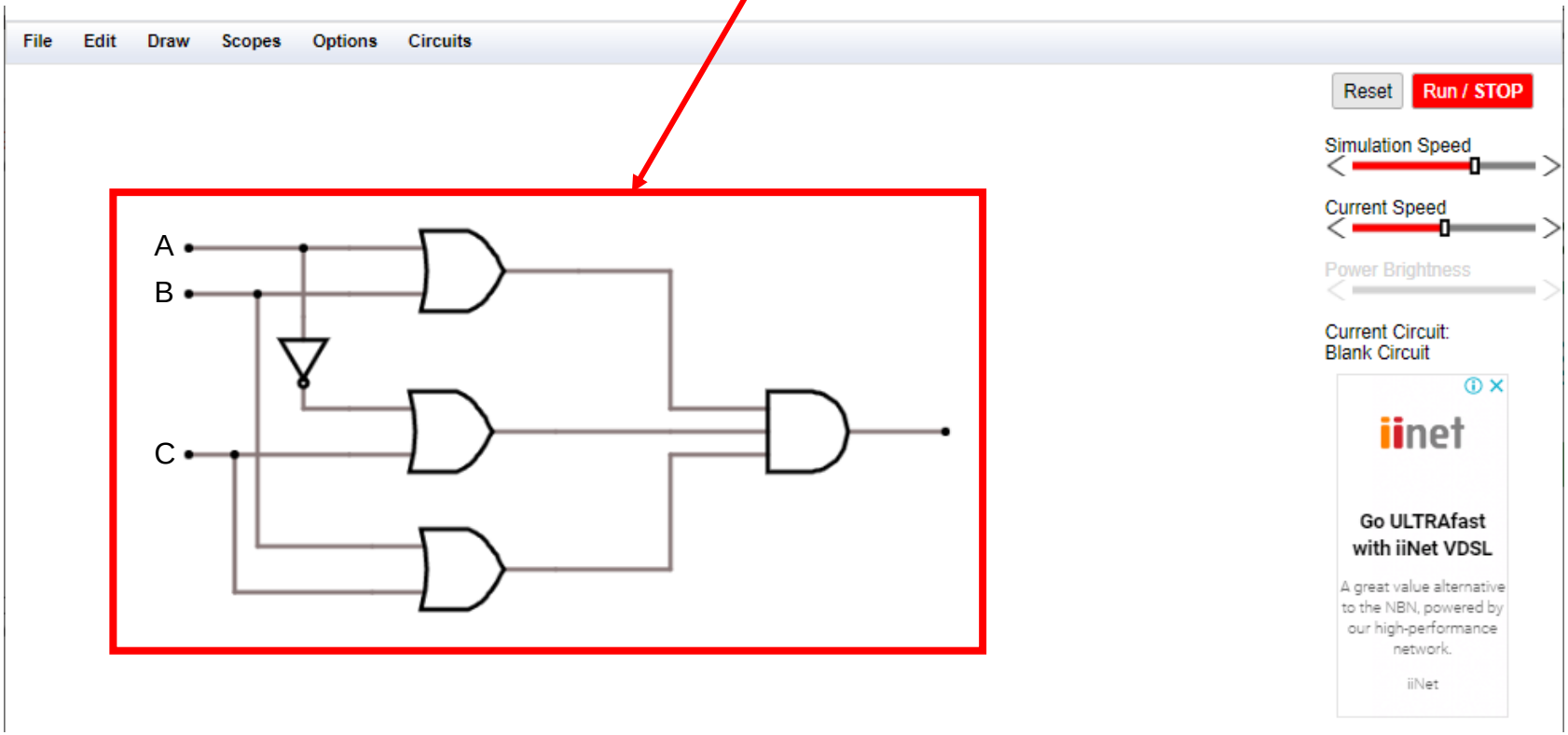

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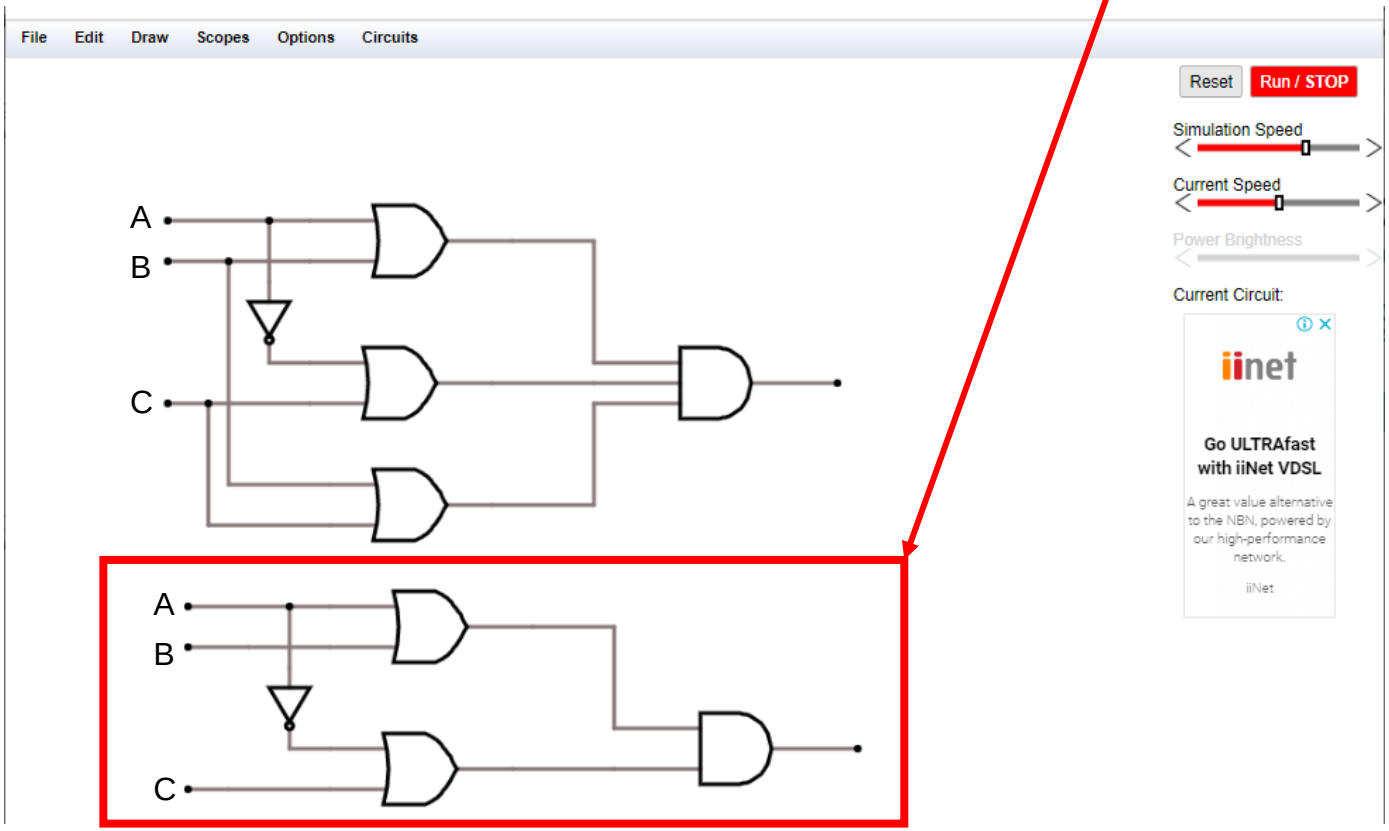

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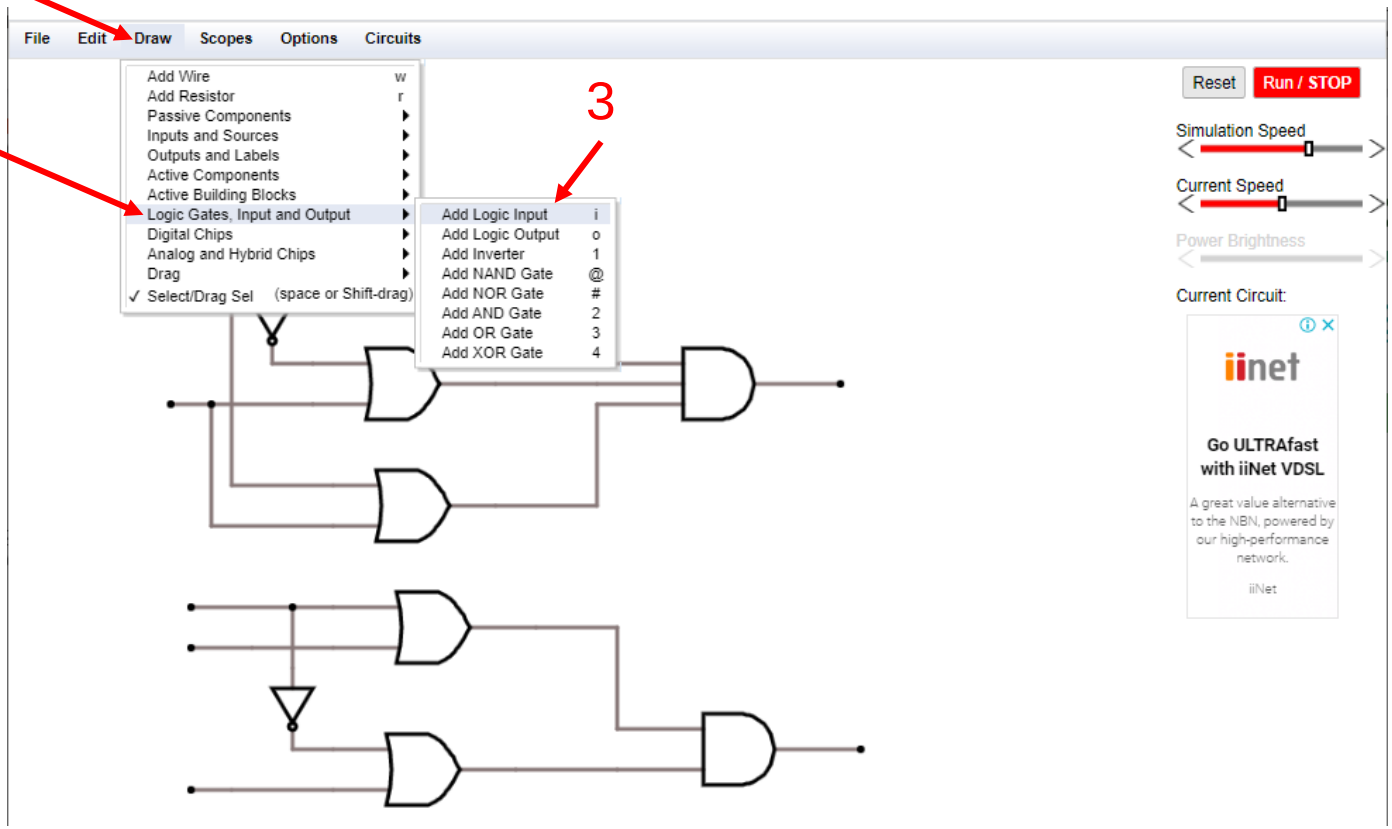

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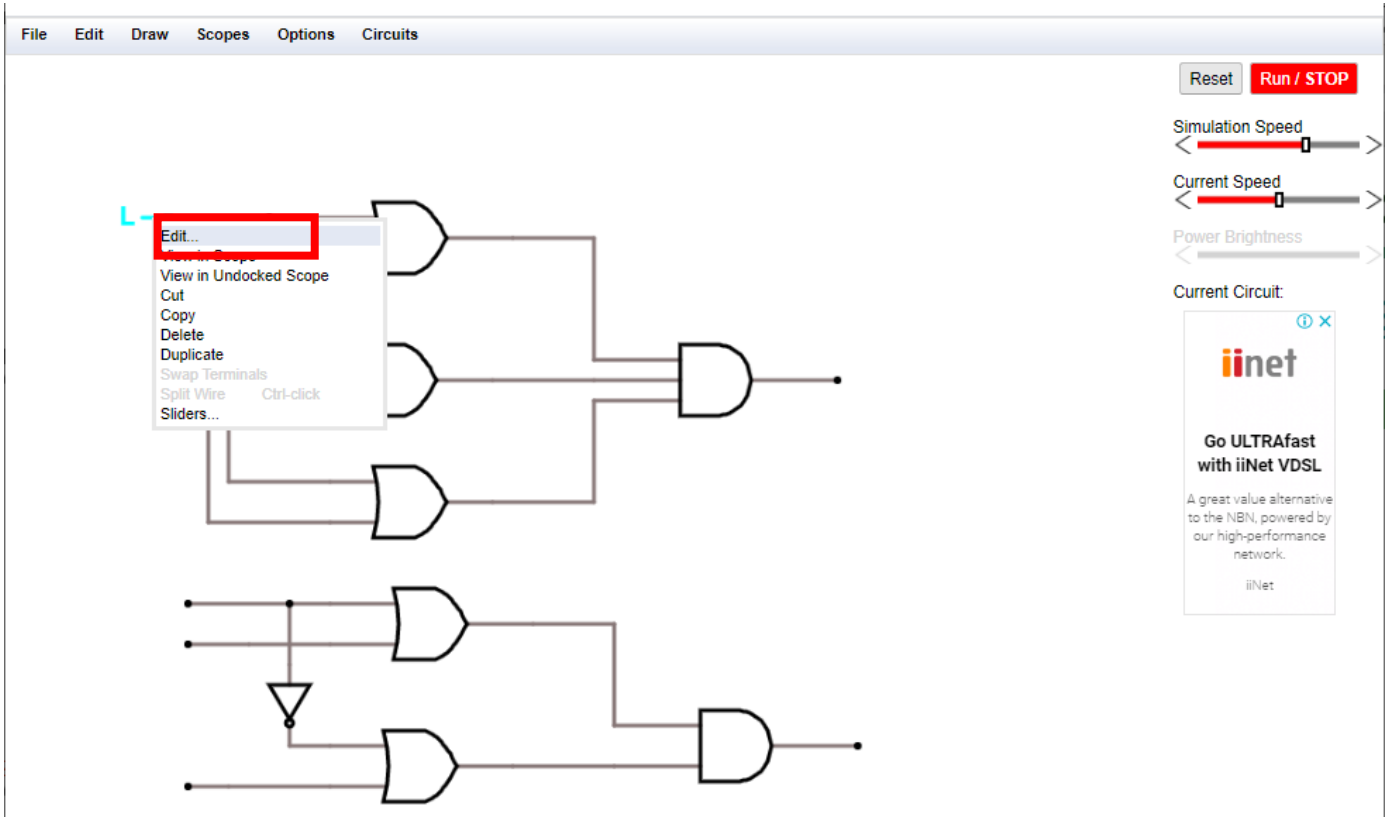

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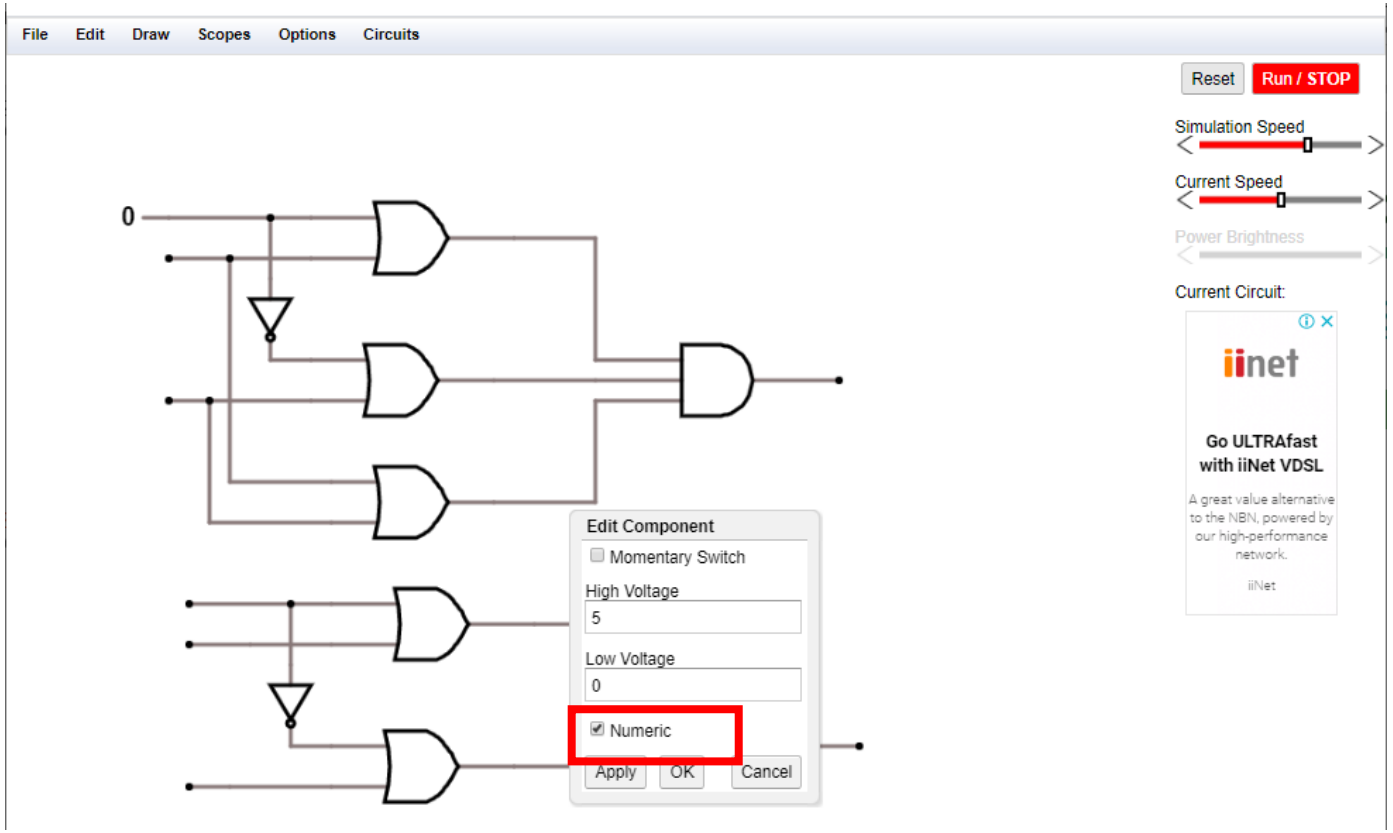

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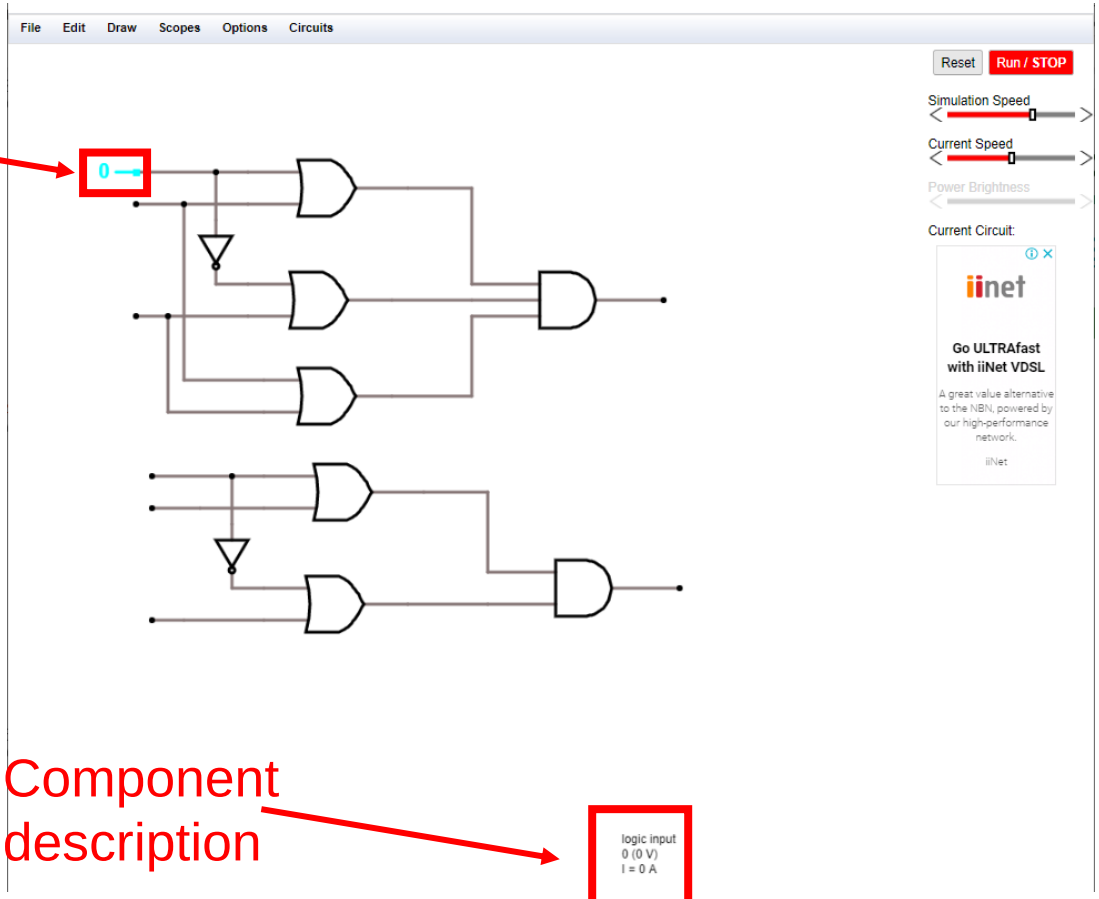
Click on component



Component description

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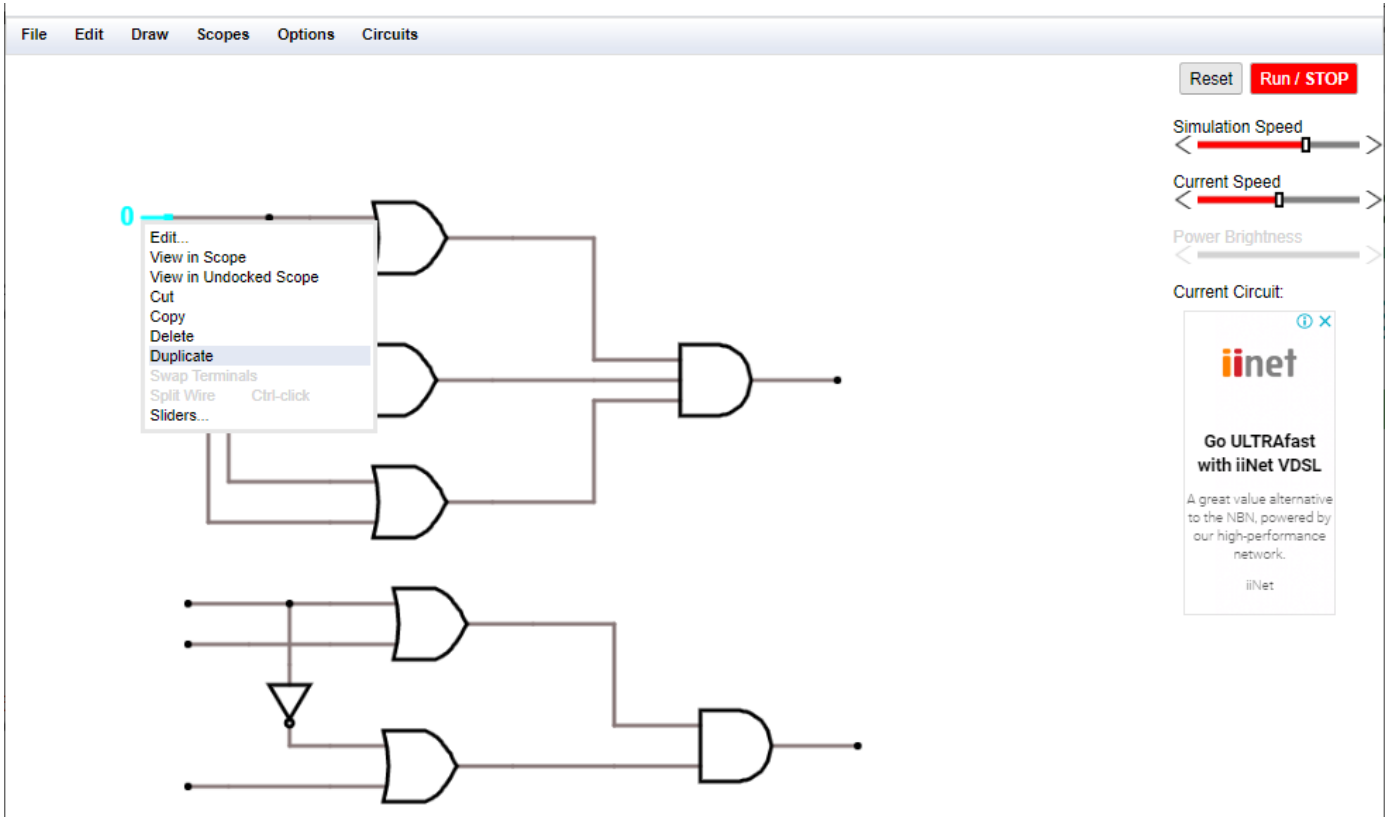

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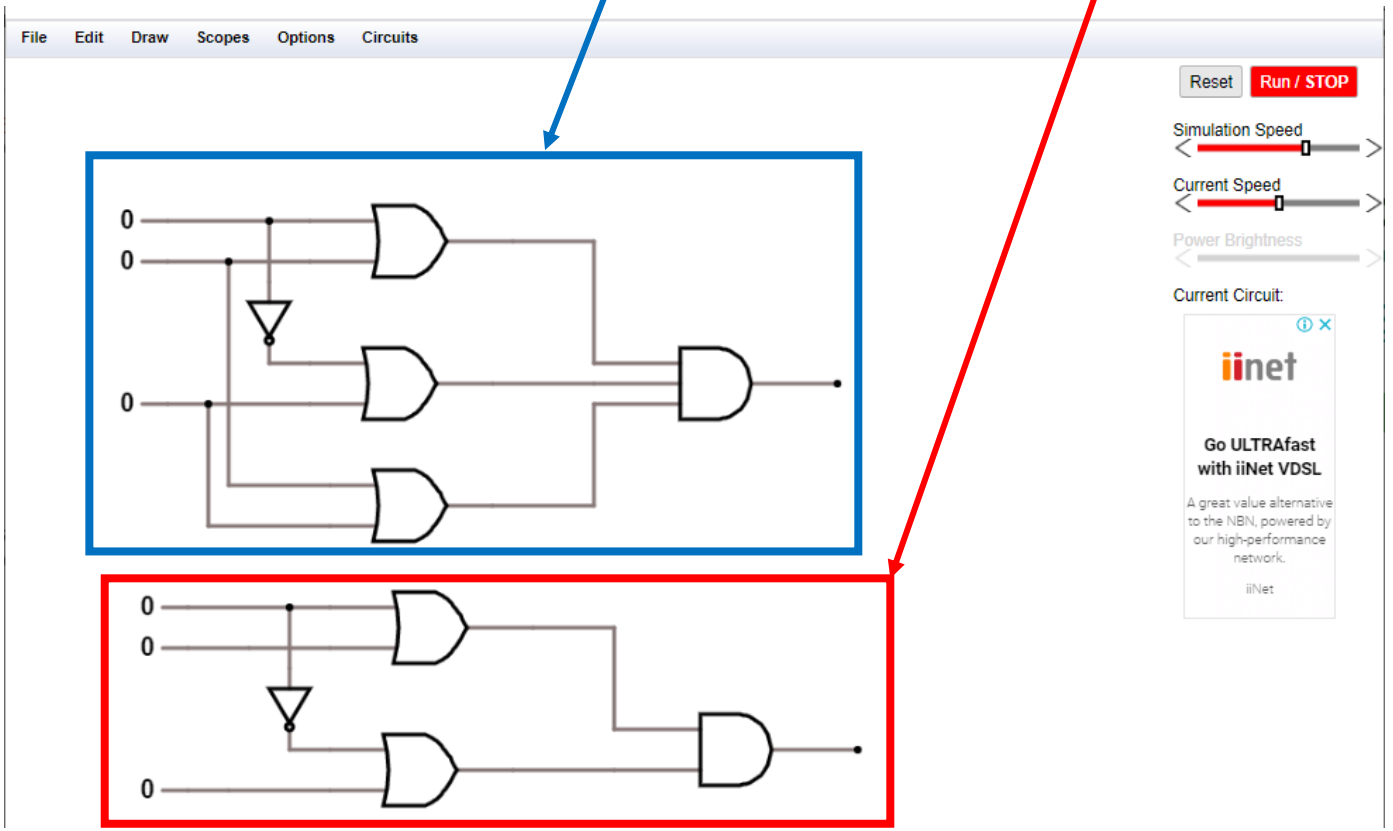

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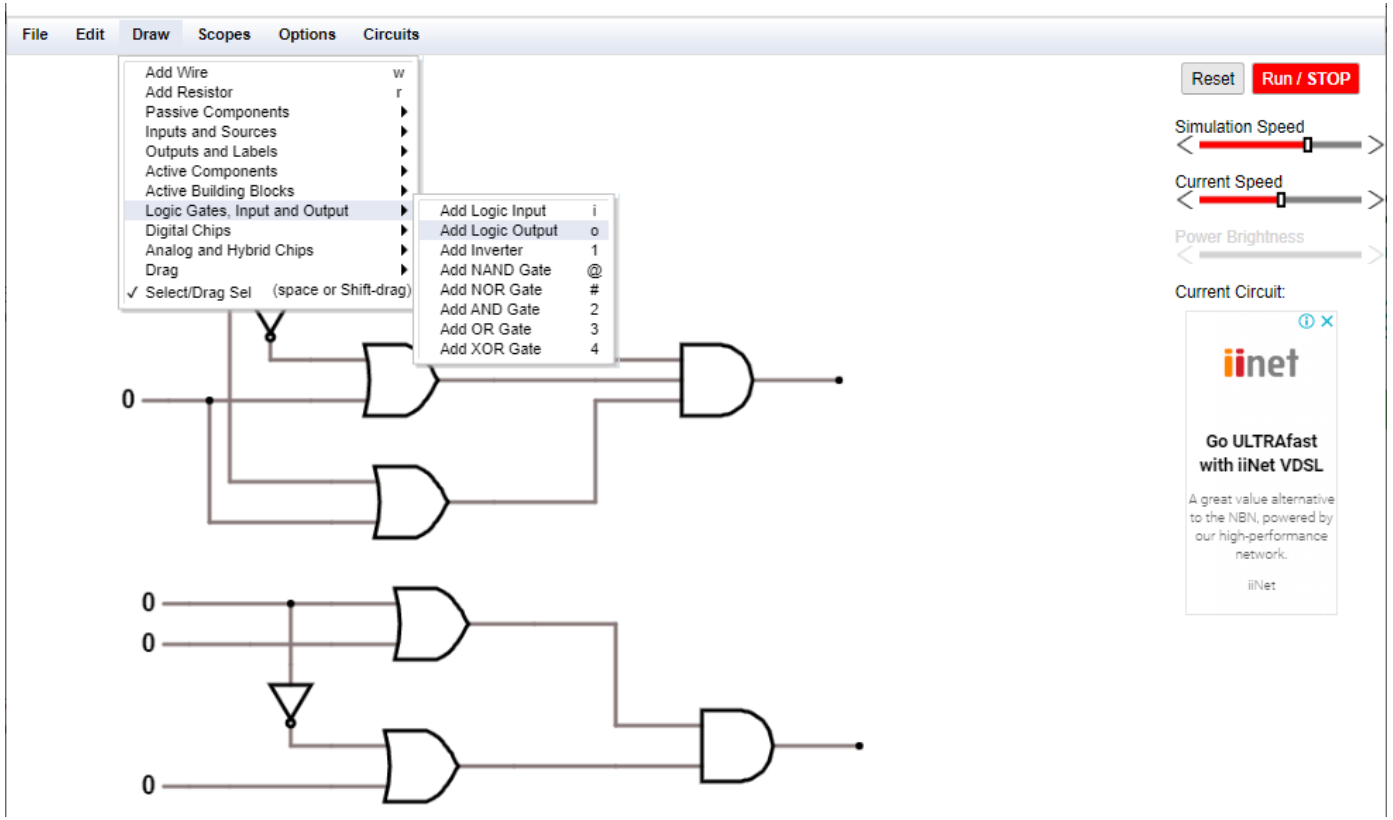

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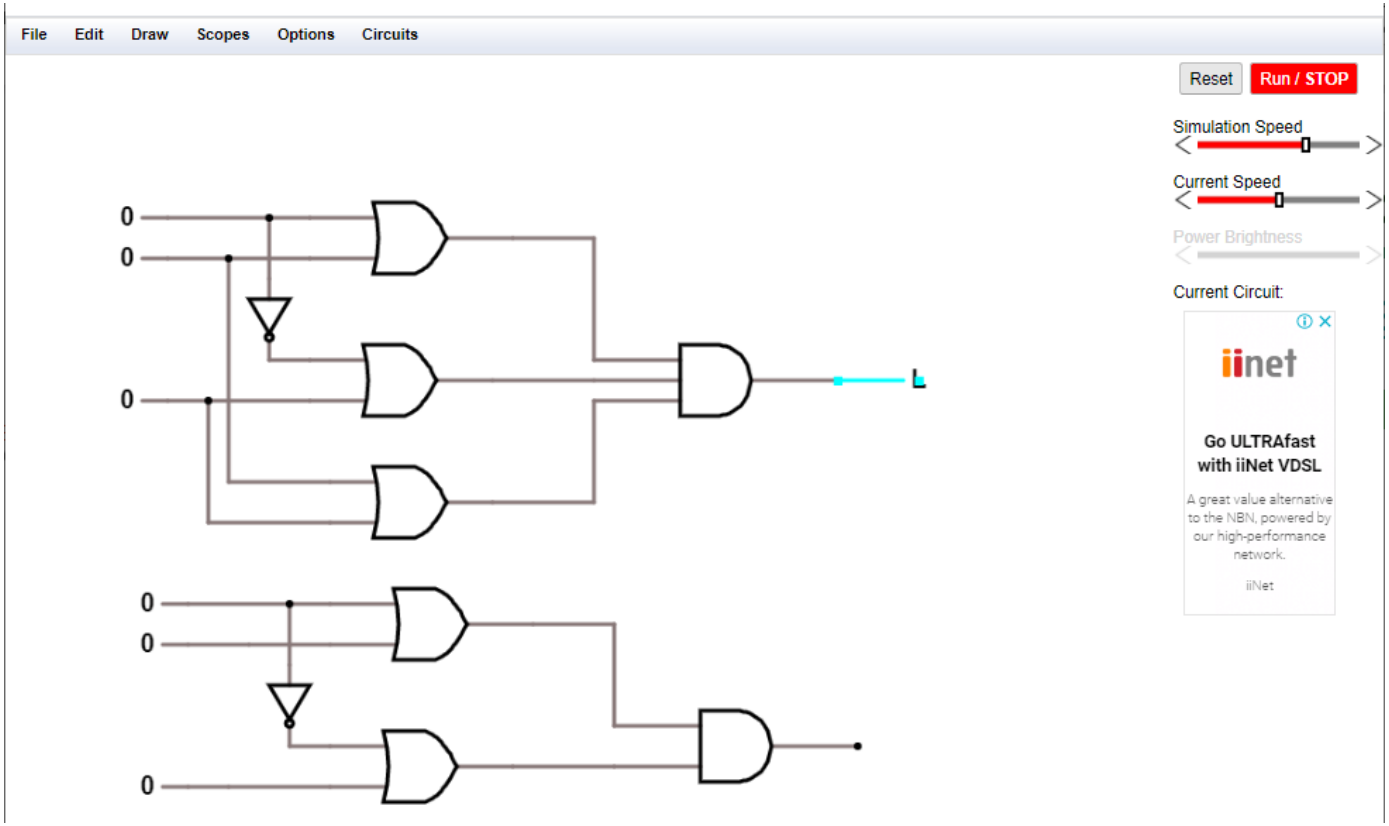

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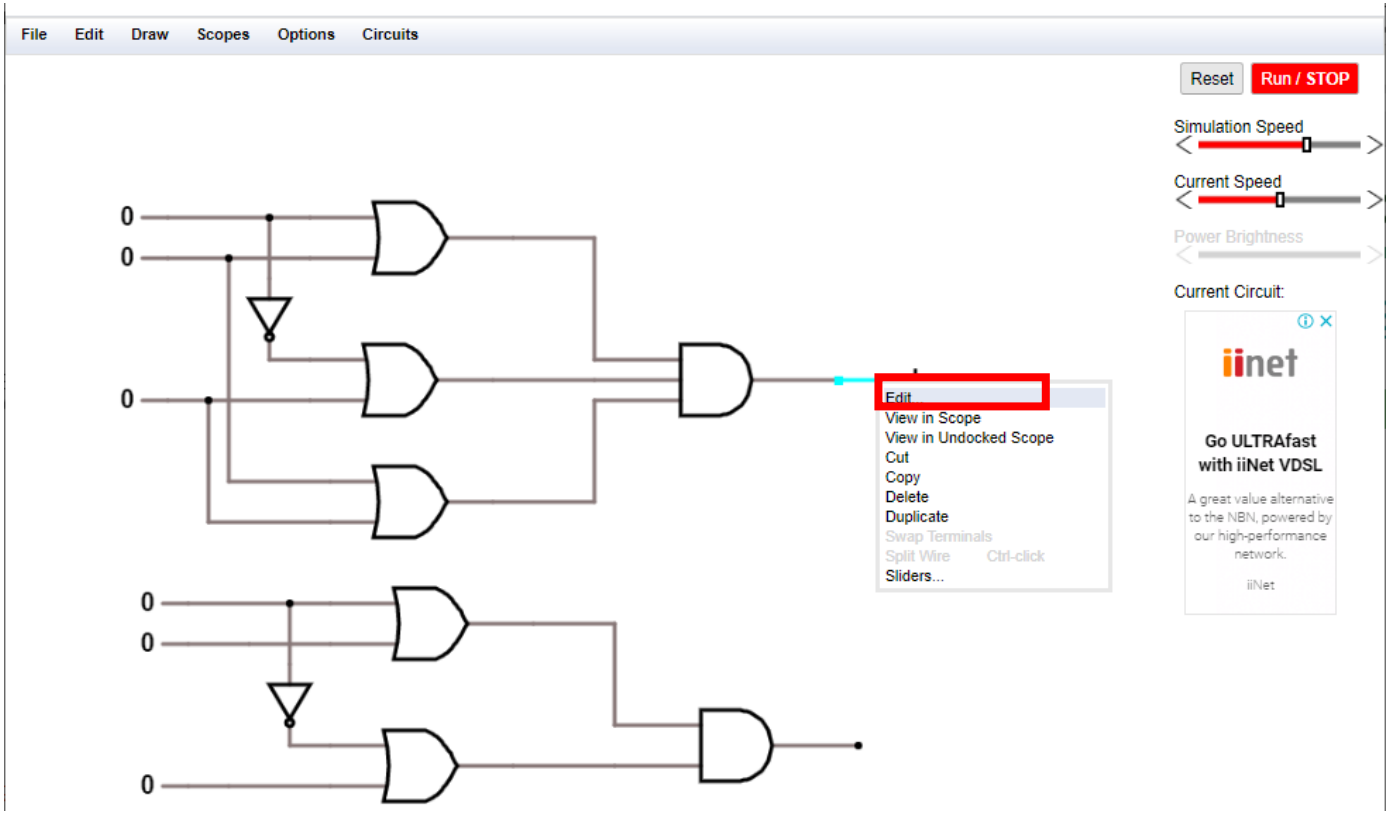

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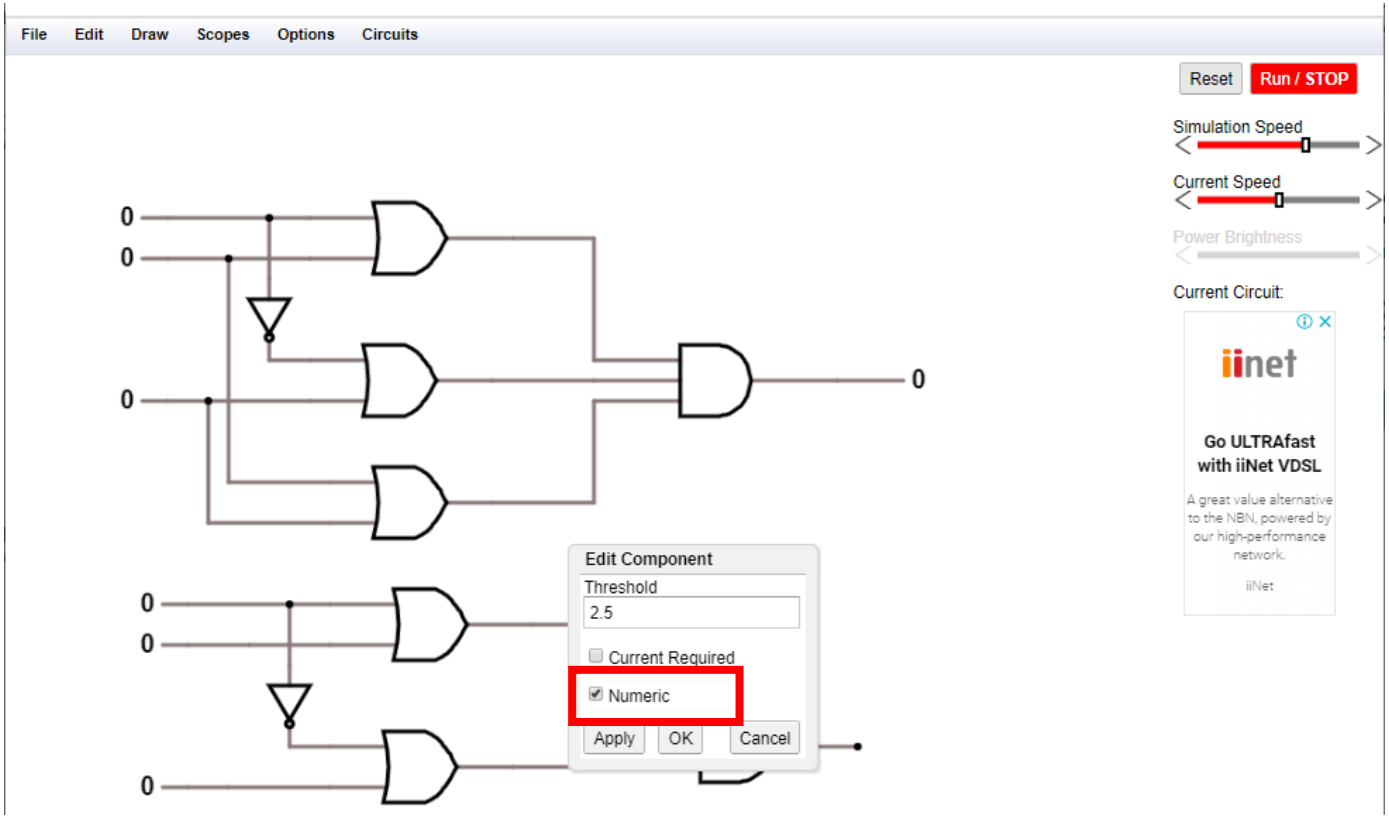

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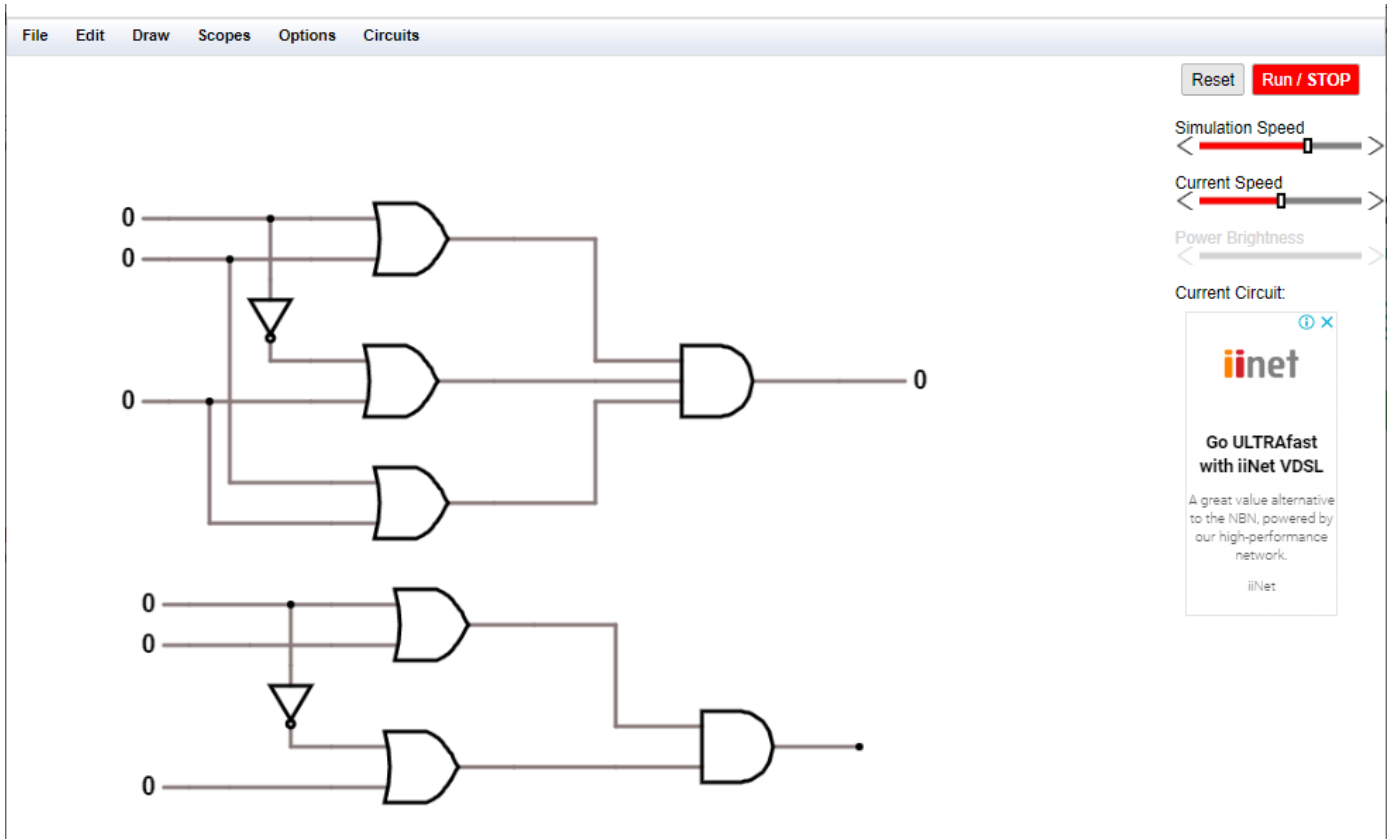

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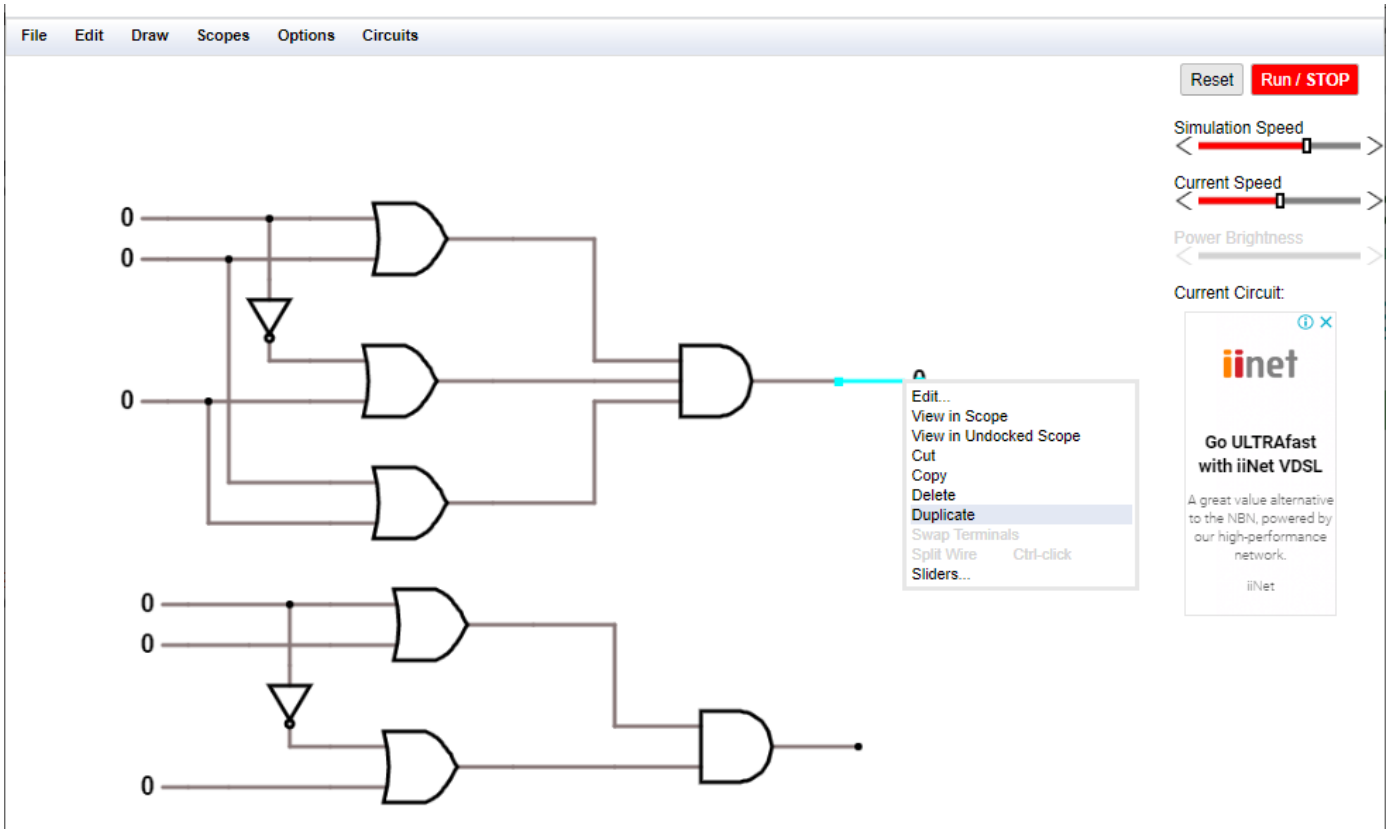

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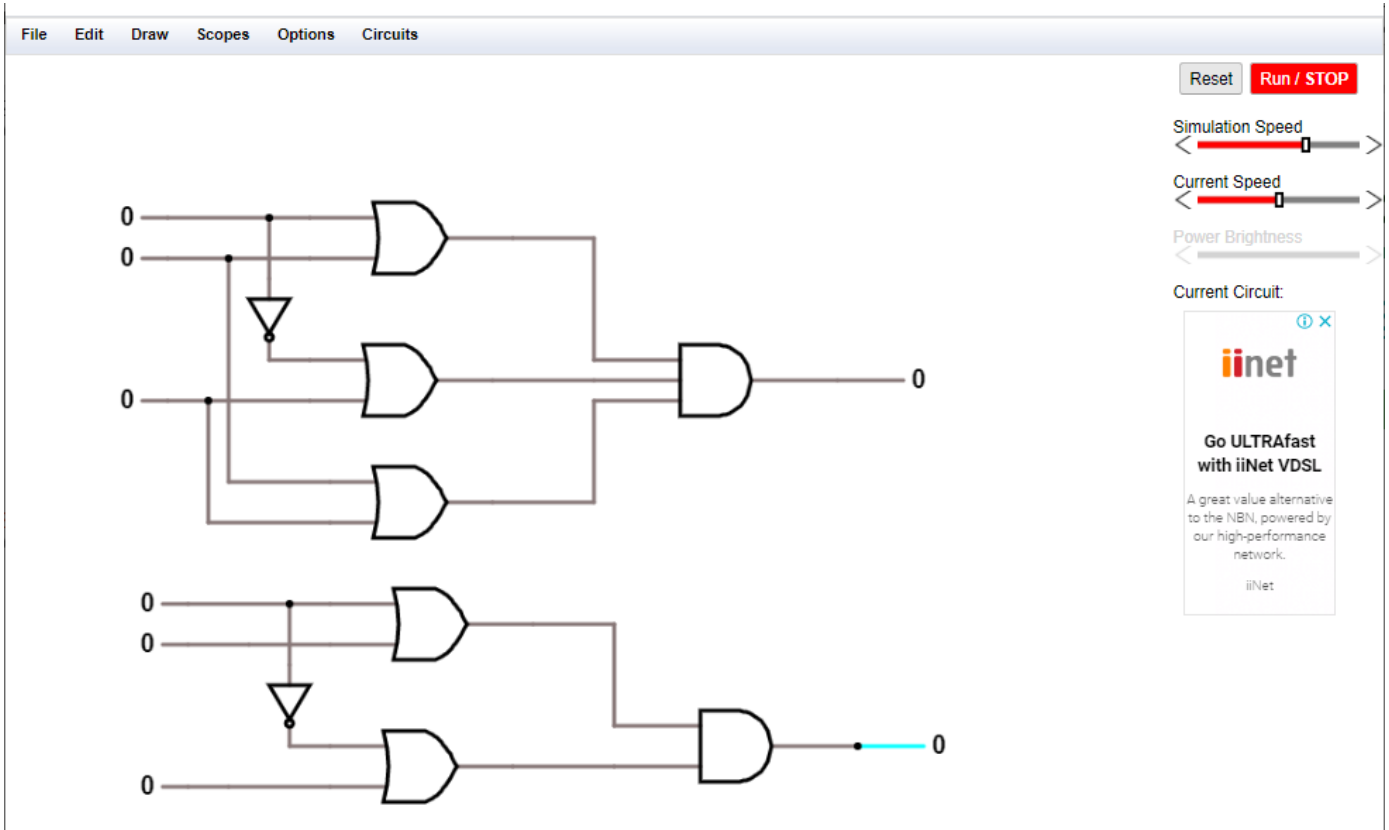

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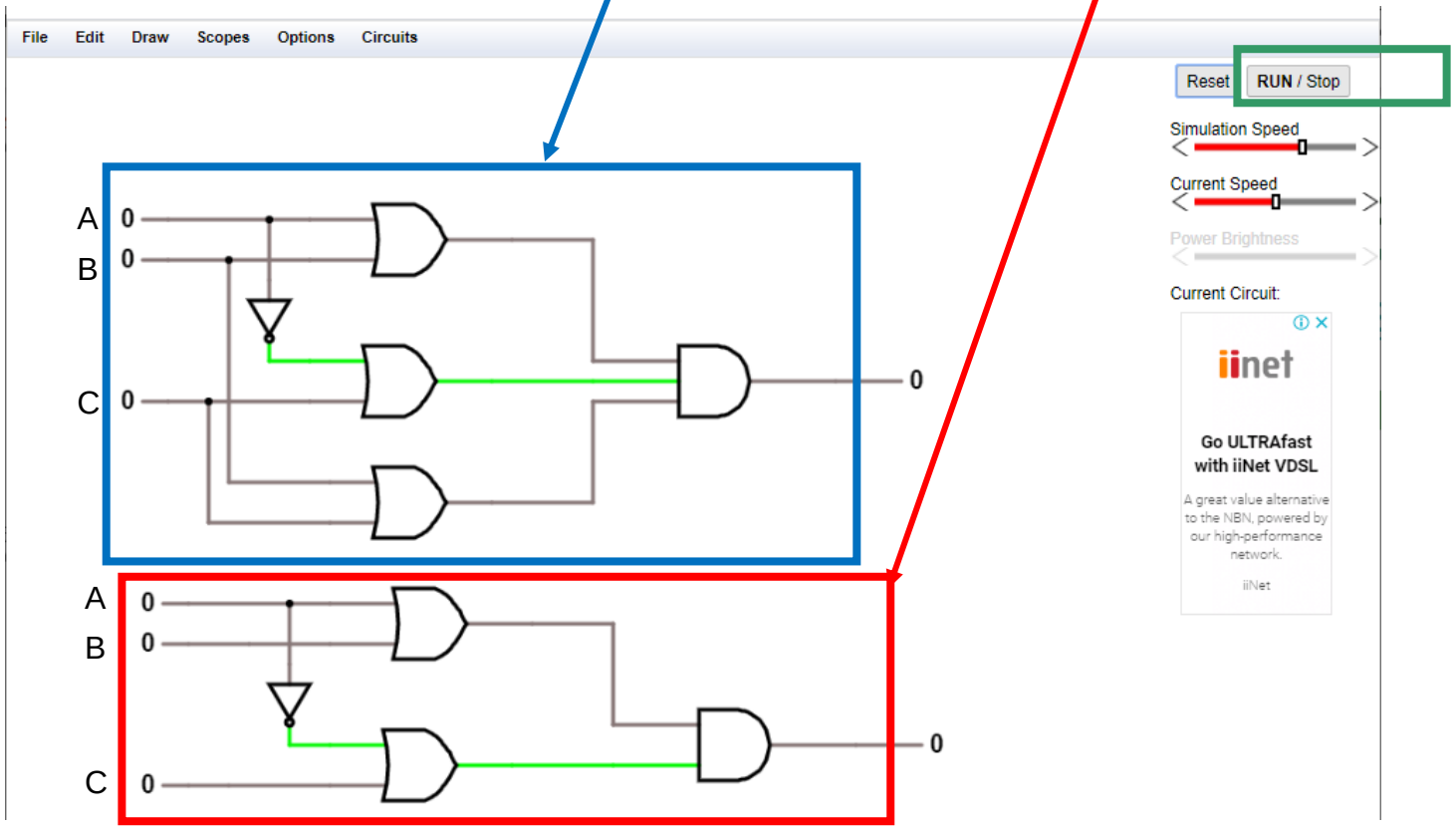

Drawing Logic Circuits using on-line simulator

https://www.falstad.com/circuit/

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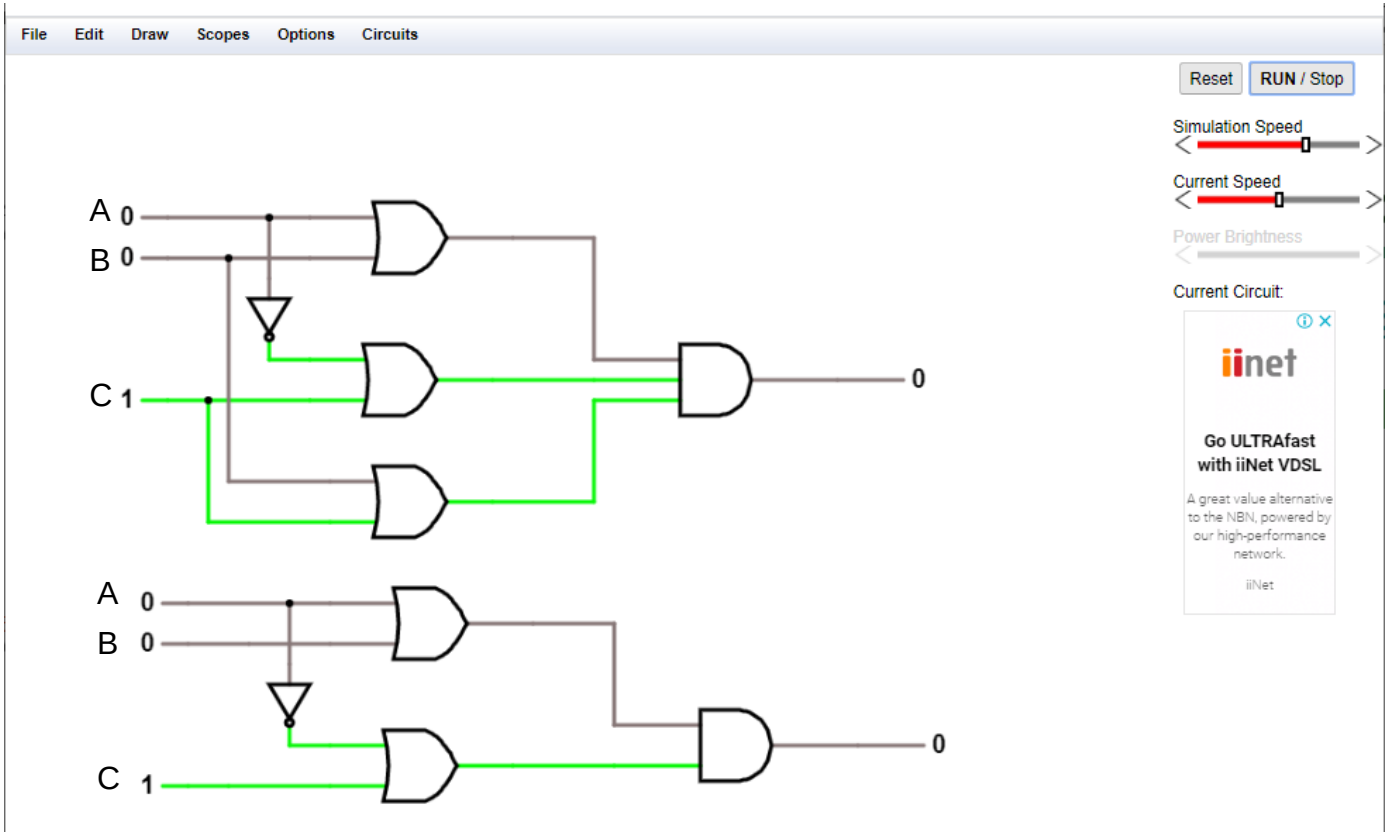

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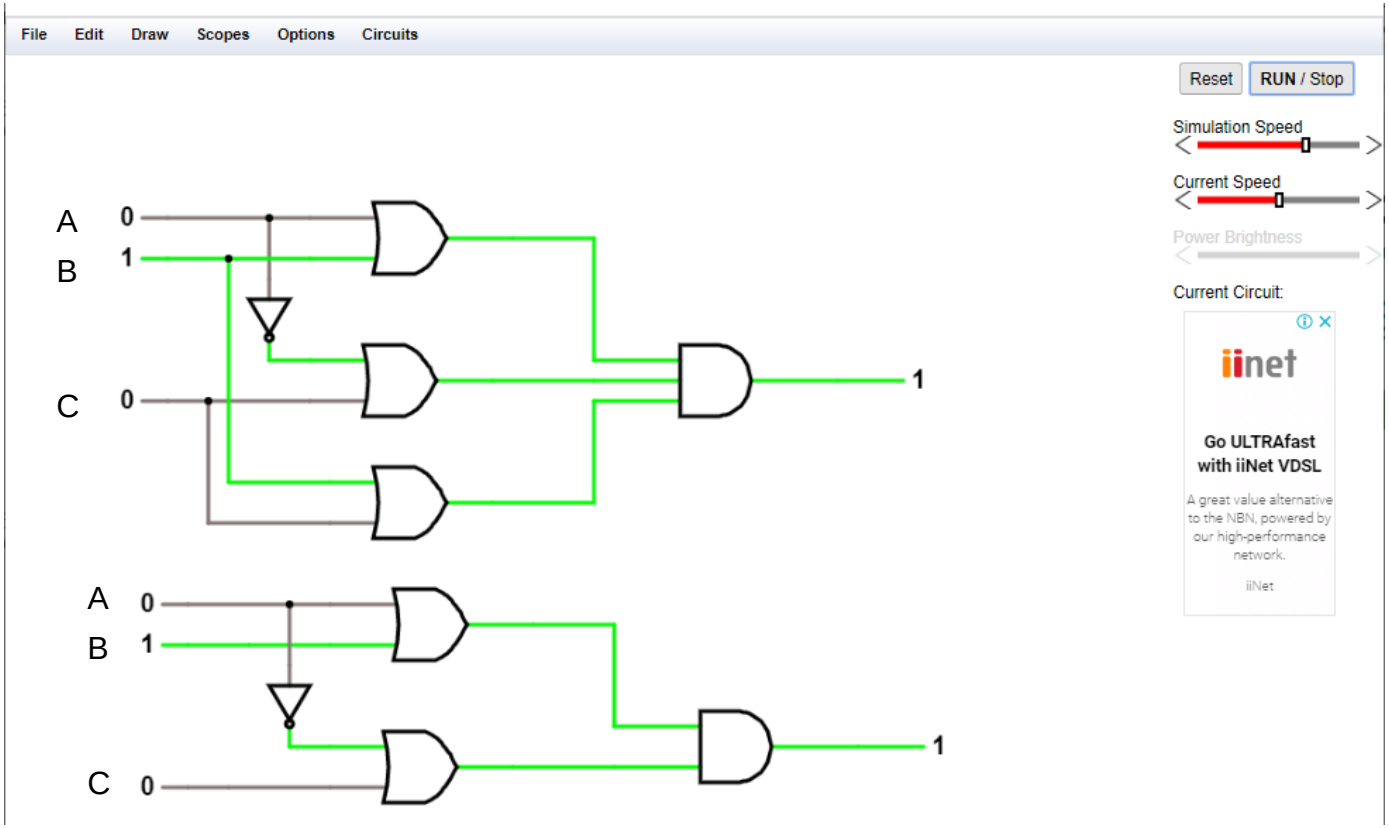

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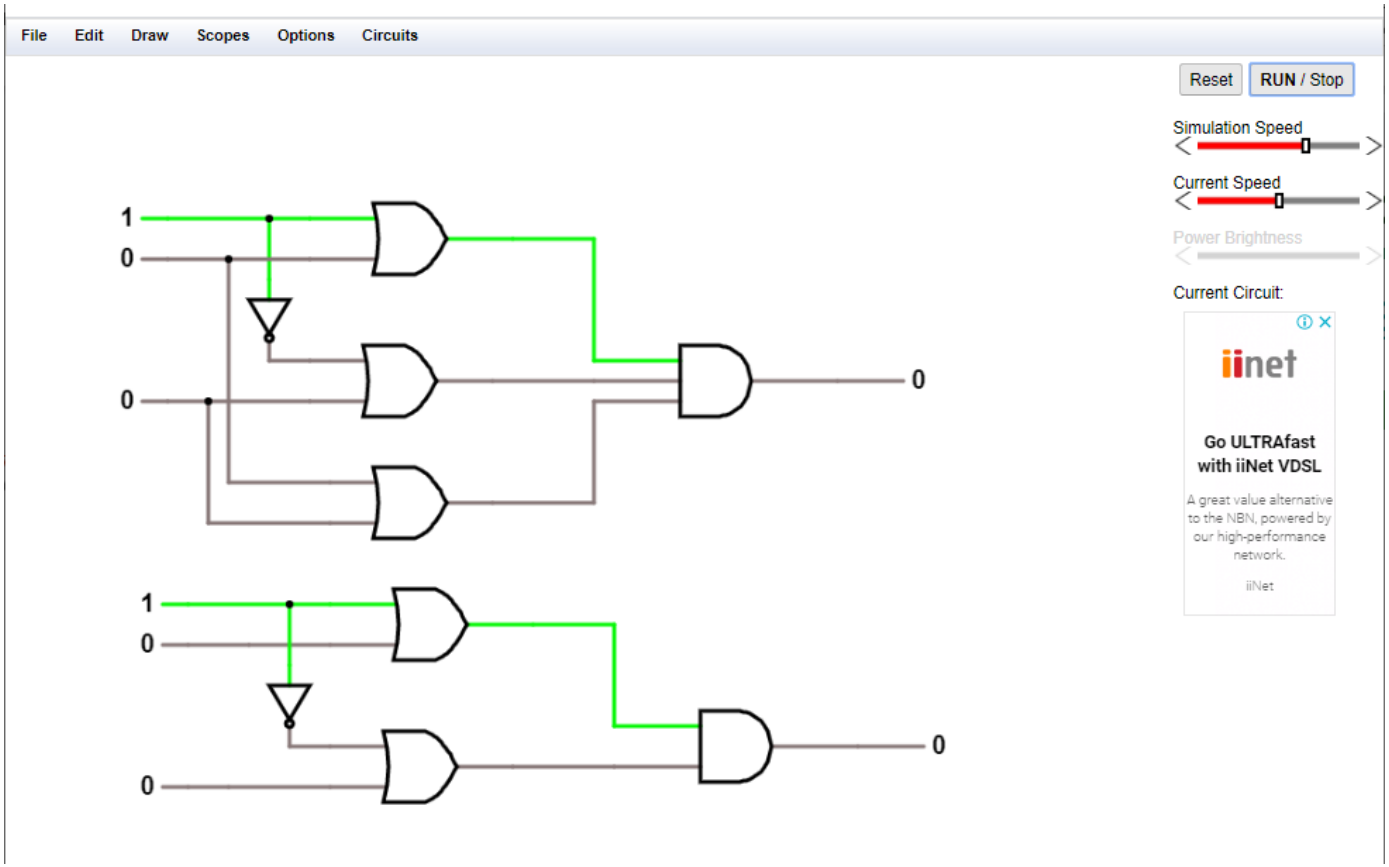

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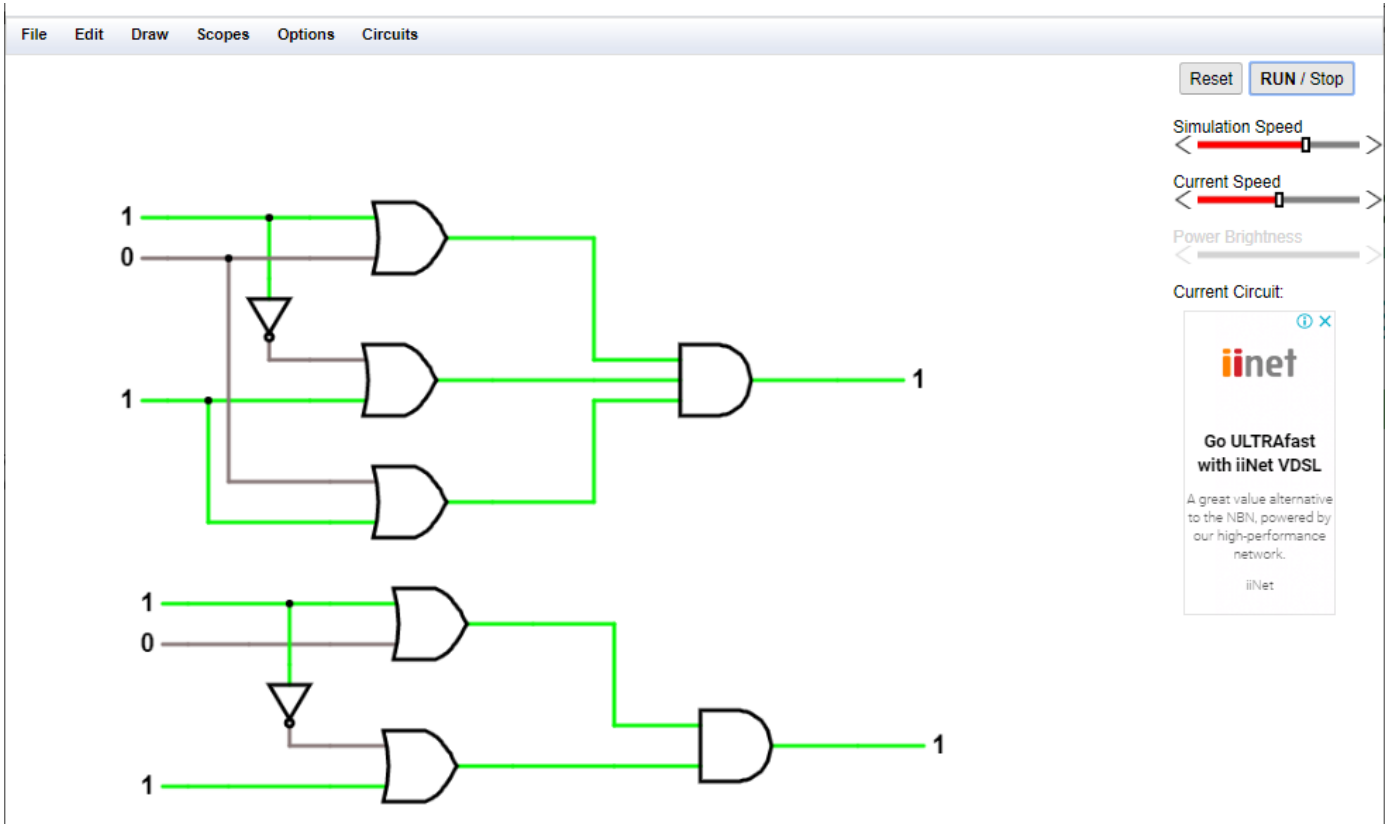

Exercises: Simulator

- C+(BC)'
- (AB)'(A'+B)(B'+B) = ? = A'
- AB+A'C+BC = ? = AB+A'
- 3 bit Parity Generator Circuit

Week 15

- Circuit simulator

  https://www.falstad.com/circuit/