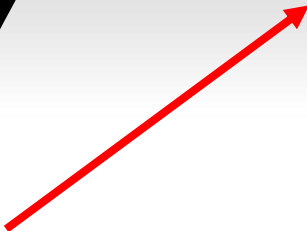




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ARDUINO STEAM ACADEMY



Art without Engineering is dreaming. Engineering without Art is calculating.

- Steven K. Roberts



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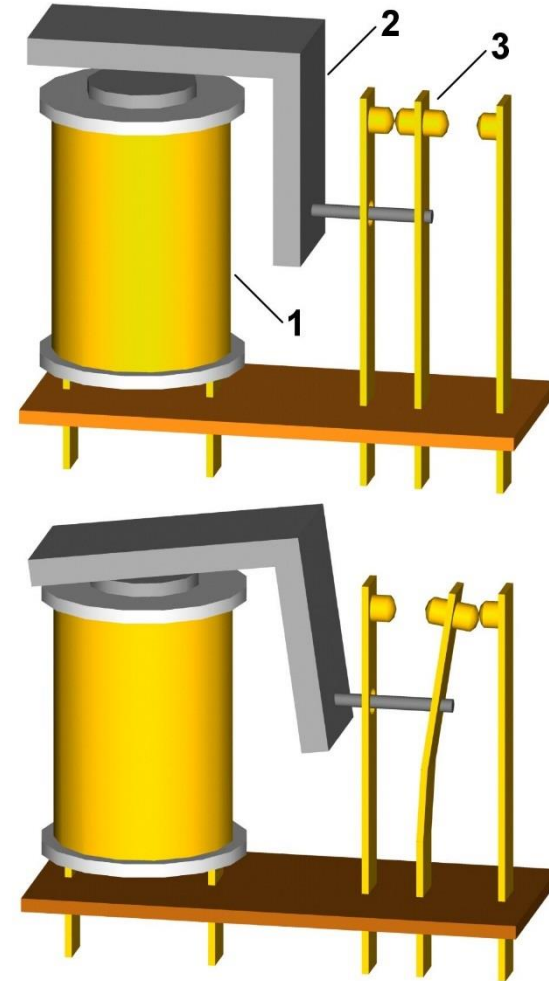
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RELAYS



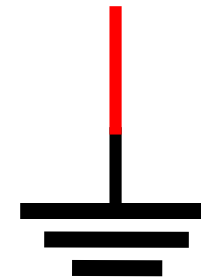
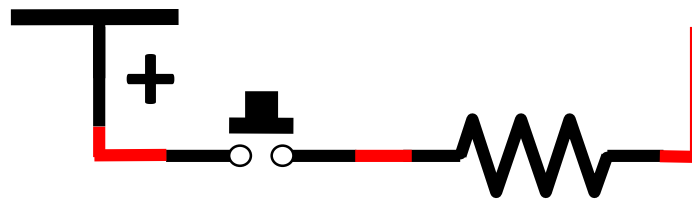
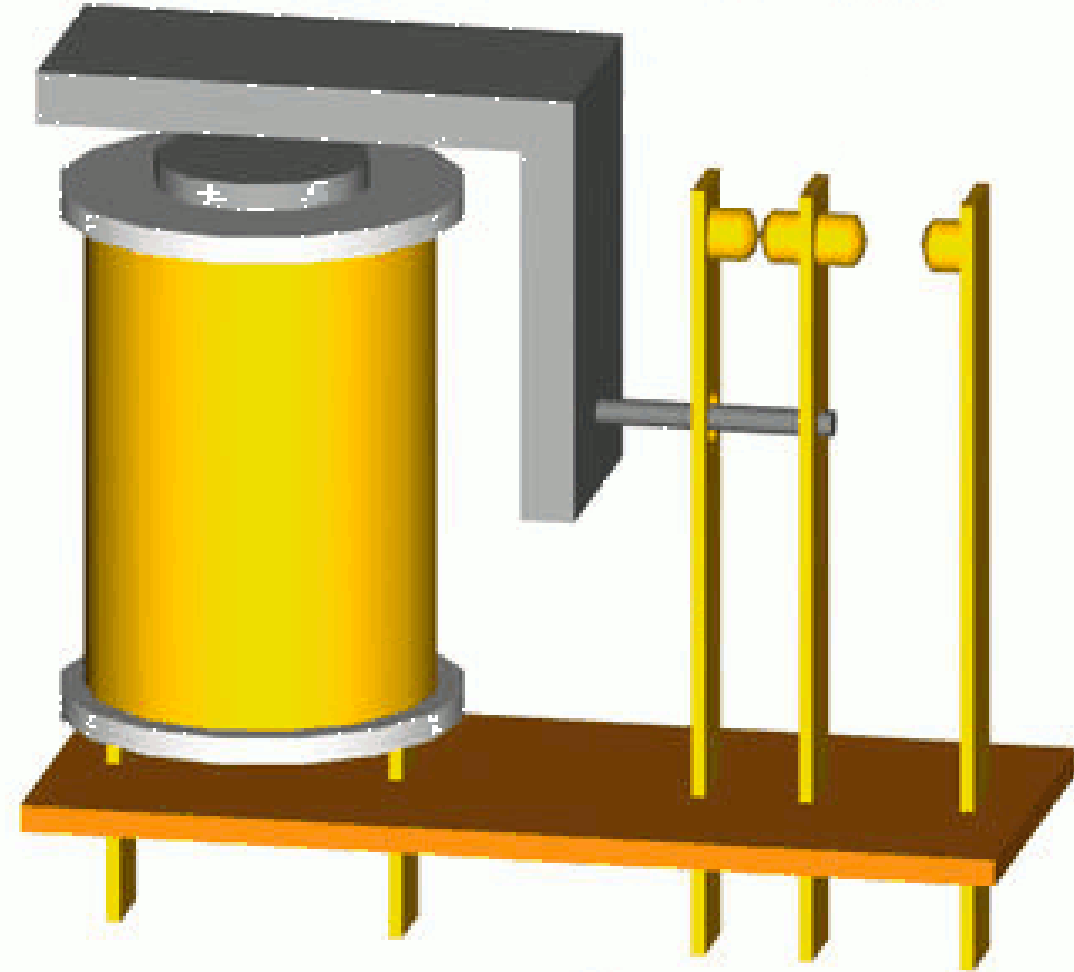
WHAT IS A RELAY?

- A relay is an electromagnetic switch operated by a relatively small electric current that can turn on or off a much larger electric current.
- The heart of a relay is an electromagnet (a coil of wire that becomes a temporary magnet when electricity flows through it).
- It gives you power to control, and control over power.

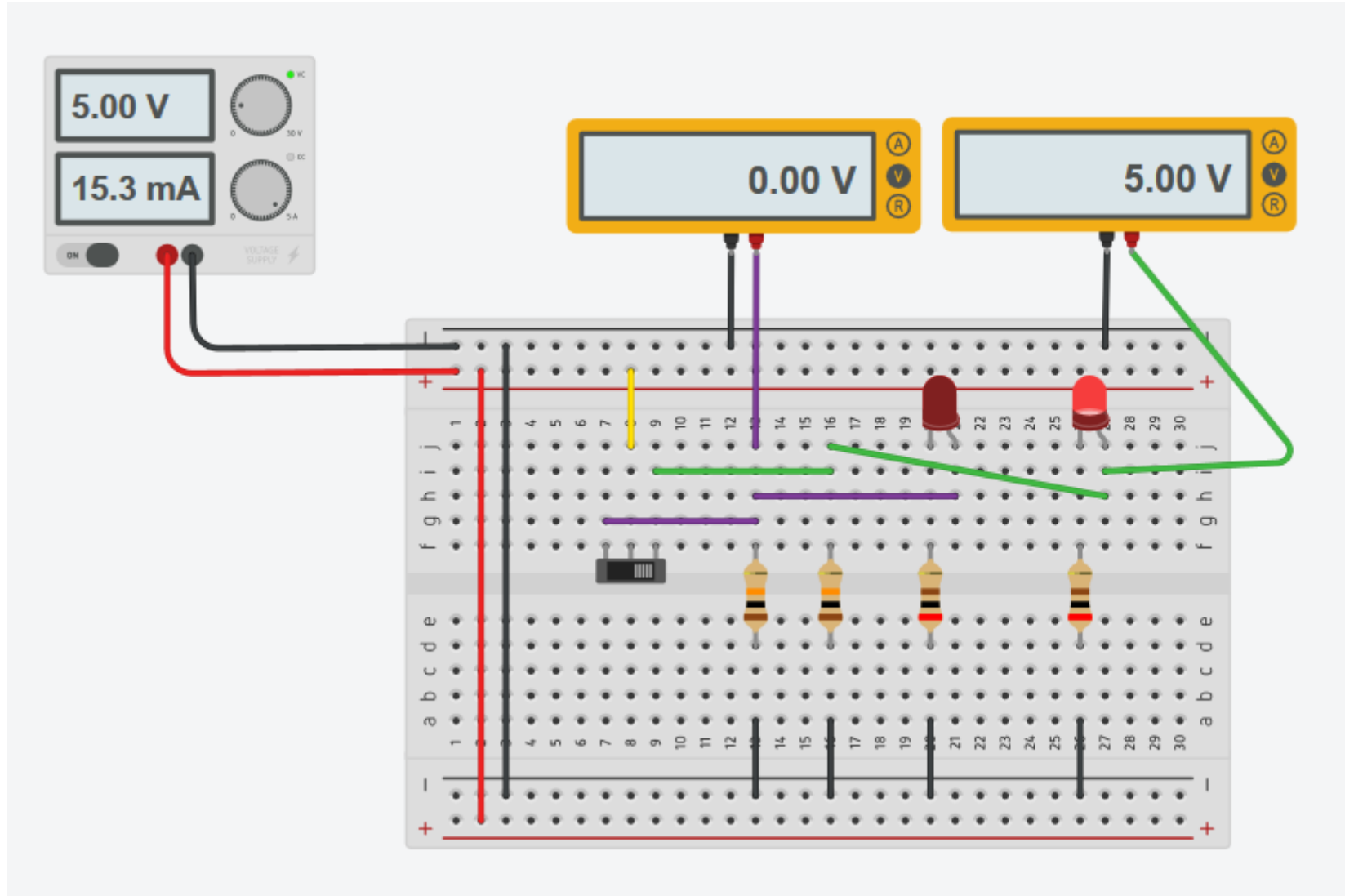


ENERGIZING A RELAY

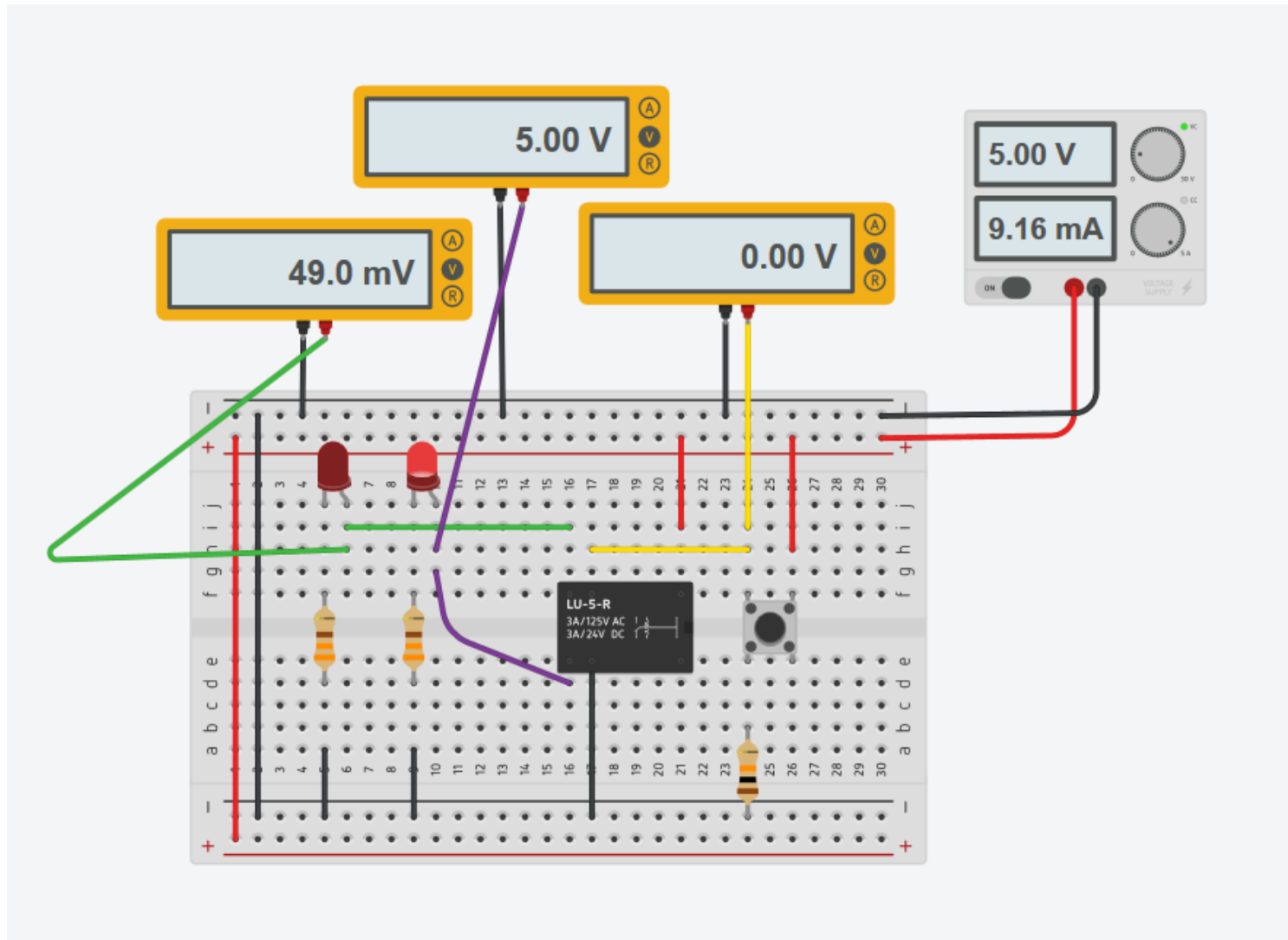
- When the coil is energized, it electro/magnetically moves the relay switch contacts



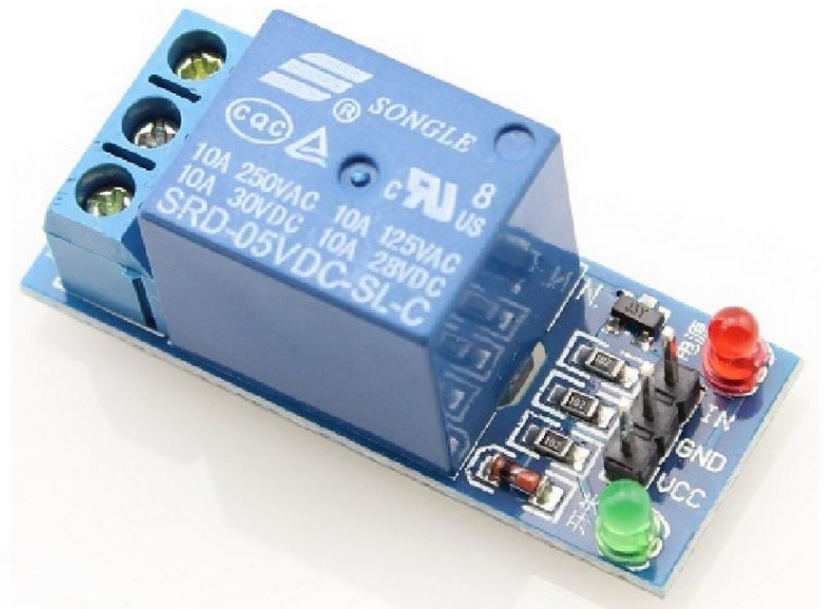
LET'S LOOK AT A SLIDE SWITCH



REPLACE SLIDE SWITCH WITH RELAY



HOW TO CONNECT?



OUTPUT

Normally
Open (NO)

Common

Normally
Closed (NC)



INPUT

On = Vcc Power

Signal

Ground

+5V VCC

On = Signal Low

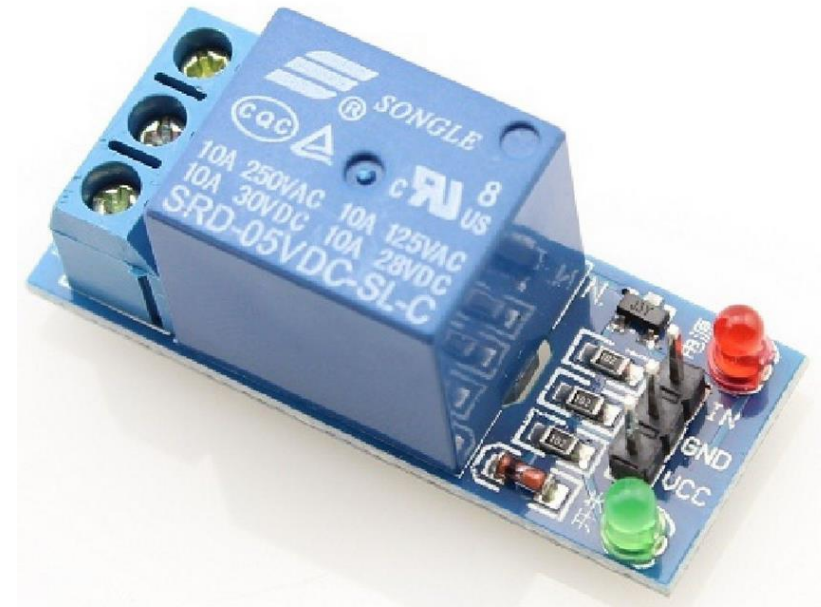


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LAB

- Using a bread board
- Connect a push button to a relay
- Connect the relay to an LED
- When you push the button, the Relay should switch and turn on the LED





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APPENDIX



APPENDIX A: LICENSE & ATTRIBUTION

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