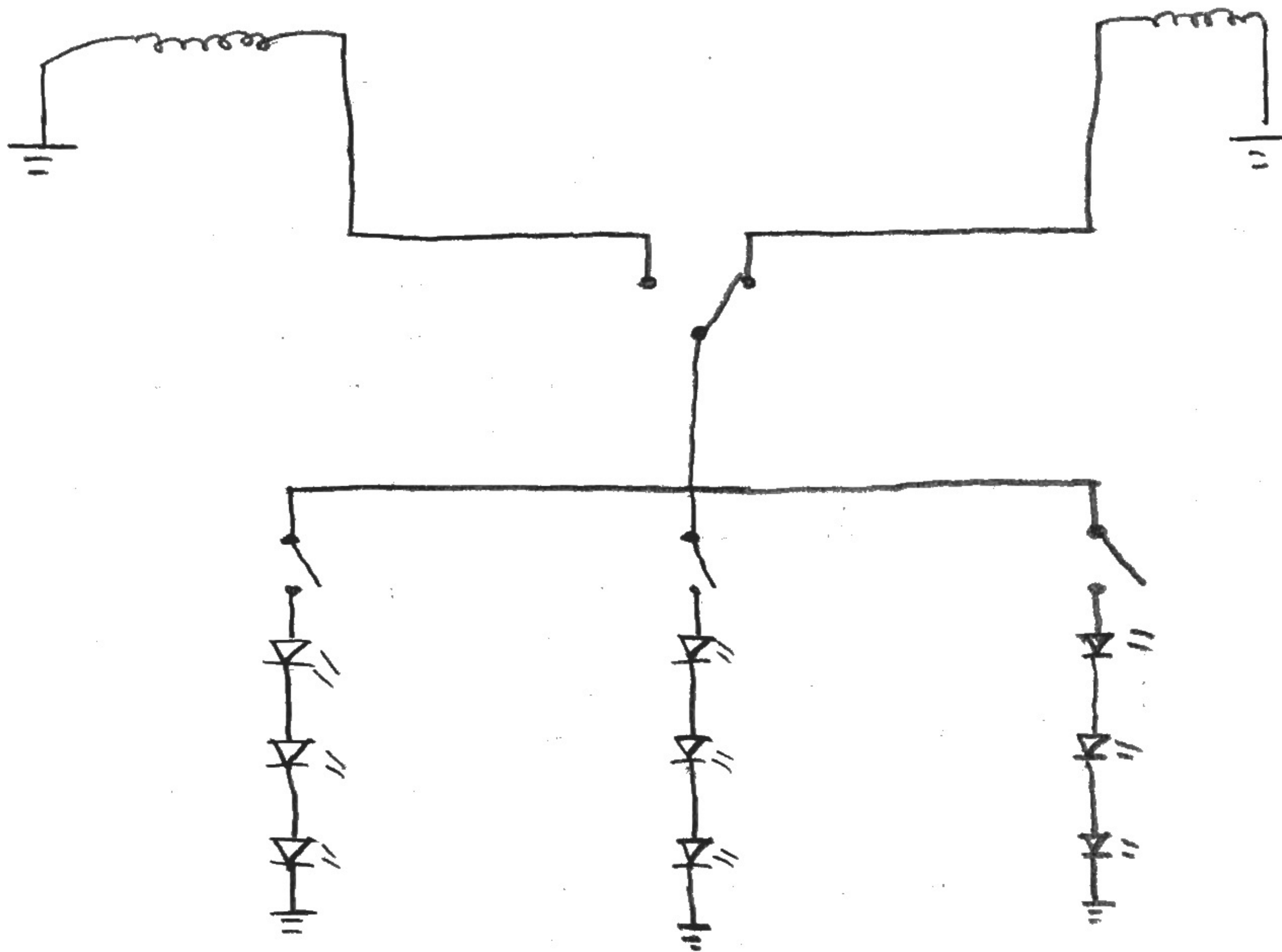


1 input : 3 output
 Crank → Generator

1 input : 6 output
 Crank → Generator



Principles to Teach:

$$\text{Input Work} = \text{Output Work} + \text{Energy Disipation}$$

work is not only how fast or how hard the generator is cranked, but the product of Force and Speed.

Observations:

- Multiple light strings increases energy disipation and thus requires more input work.
- To achieve the same lighting, the same work must be input with each crank. This is dependent on speed and torque.

Notes:

All switches will be manually opperated.