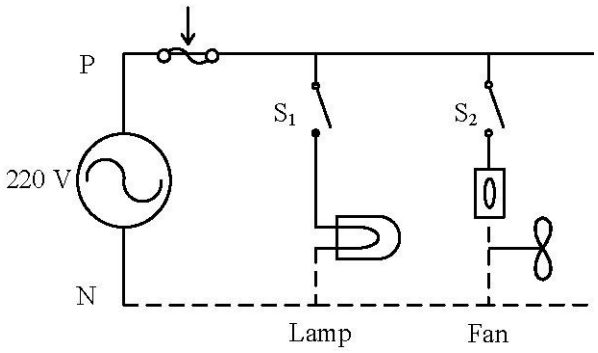
Experiment No.6 **Date:09/11/2021**

House Wiring Circuits in TinkerCAD

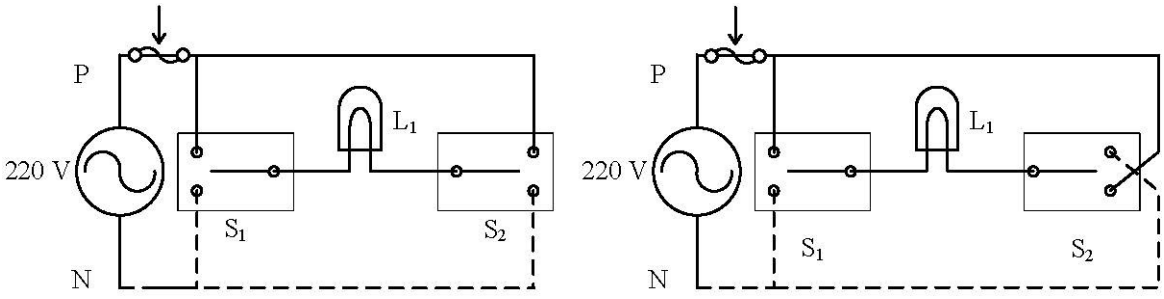
Objectives:

1. To make a simple wiring circuit for two lamps
2. To make a staircase wiring/corridor wiring/godown wiring

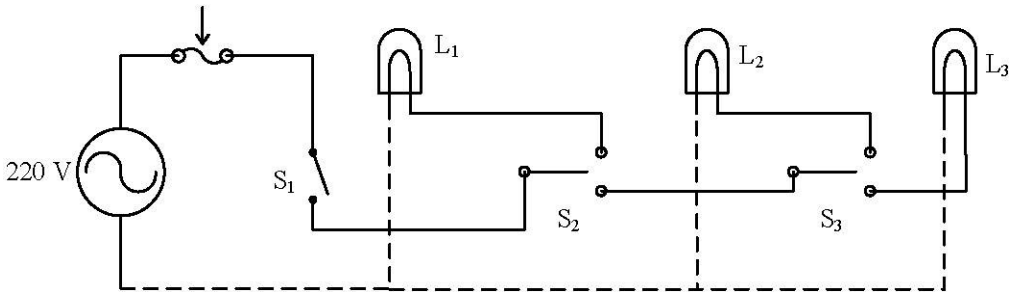
Circuit



Wiring Circuit for a Lamp, Fan and Socket



Stair Case Wiring Circuit



Corridor/Godown Wiring Circuit

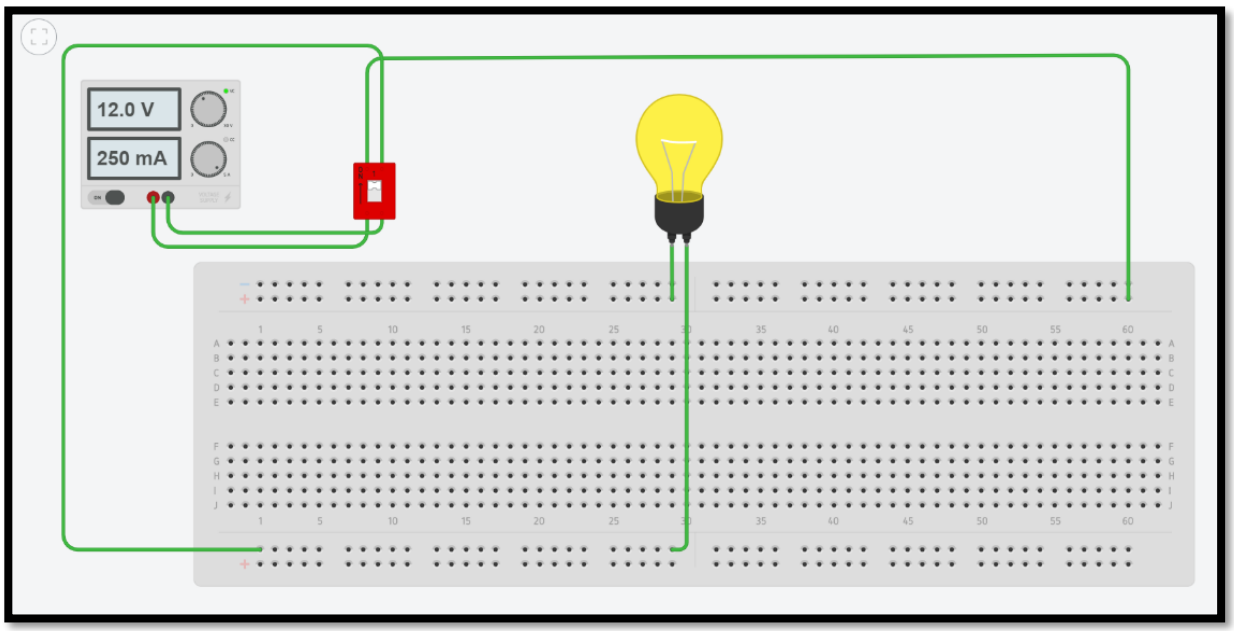
Observation:

S. No	Parameter to be measured	Value Measured/ Calculated
1	Voltage Across L1	12V
2	Current drawn by L1	250 mA
3	Power Absorbed by L1	3W
4	Equivalent Resistance of L1	48Ω

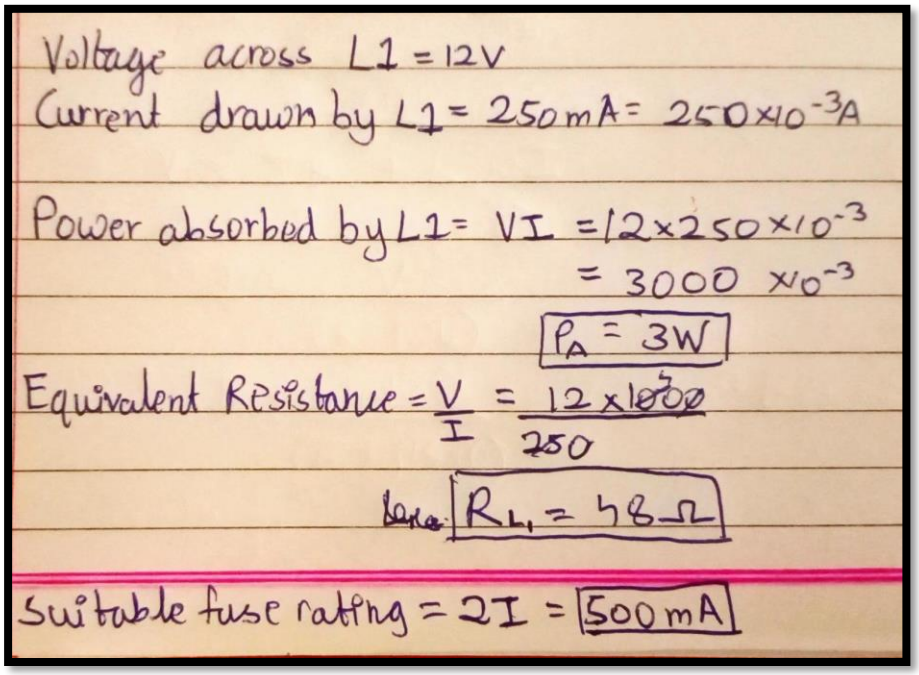
Staircase Wiring Observation:

Switch 1	Switch 2	Lamp1 (XOR LOGIC)
OFF	**OFF**	**OFF**
ON	**OFF**	**ON**
OFF	**ON**	**ON**
ON	**ON**	**OFF**

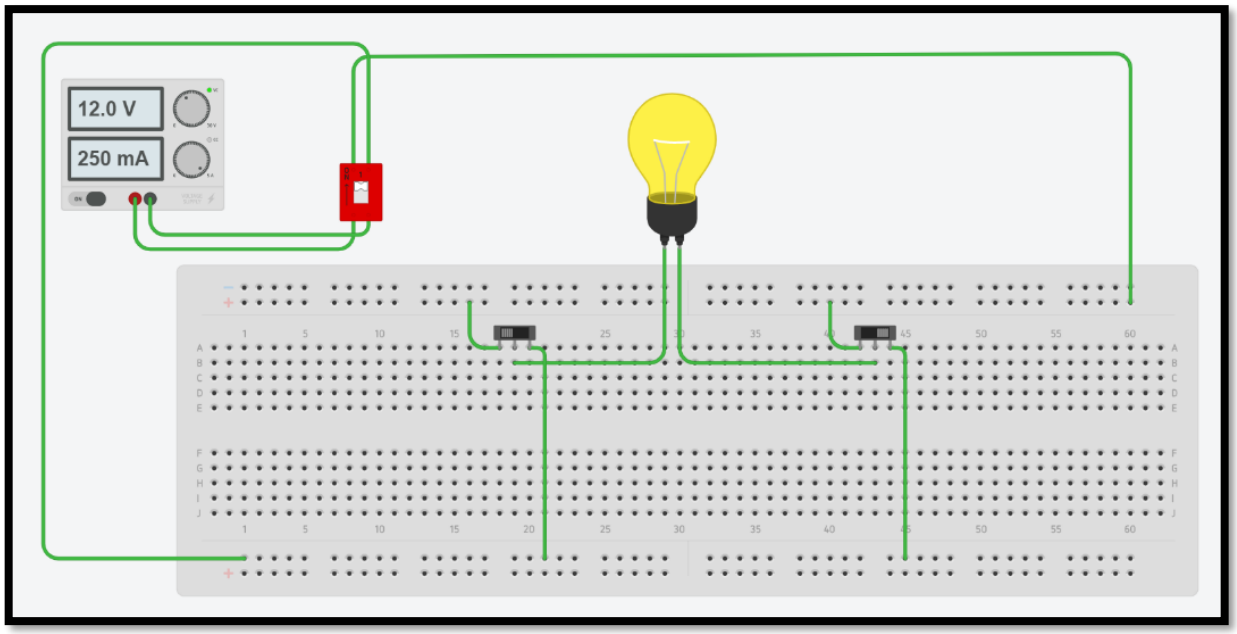
Double Port Single Throw (DPST) Switch:



Calculation:



Staircase Wiring:



Godown Wiring: