

## Experiment 1.2

Visit <https://alasso.tech/>

Student Name: Alasso

Branch:

UID:

Section/Group:

Date of performance:

Subject name: Digital Electronics

### Aim:

- a) Design a burglar alarm (AND).
- b) Design a single doorbell ringer for both front and back doors (OR).

### Apparatus:

7404 (NOT) IC, 7408 (AND) IC, 7432 (OR) IC, 5V Power Supply, Breadboard, Connecting wires, Simulation software, Windows 10 PC

### Circuit diagram/ Block diagram

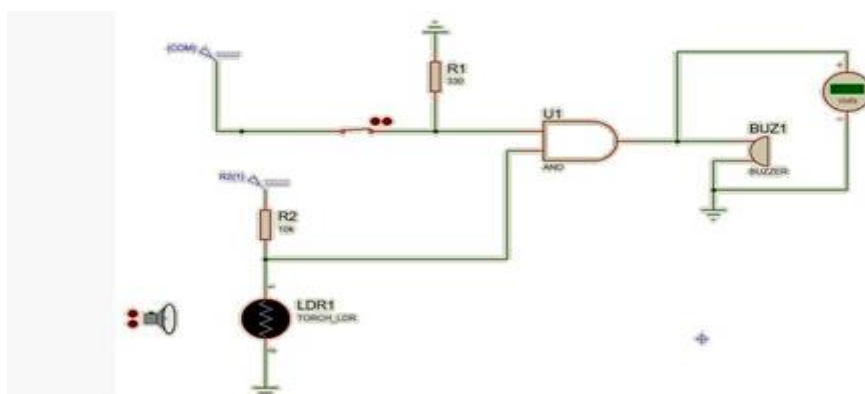


Figure: Schematic for burglar alarm.



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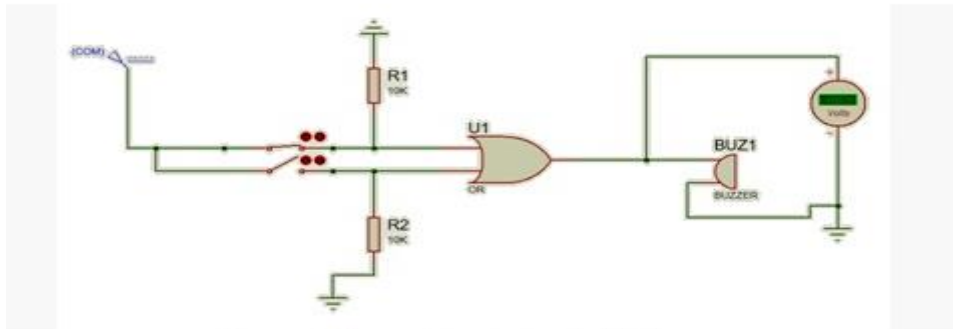


Figure: Schematic of doorbell ringer.

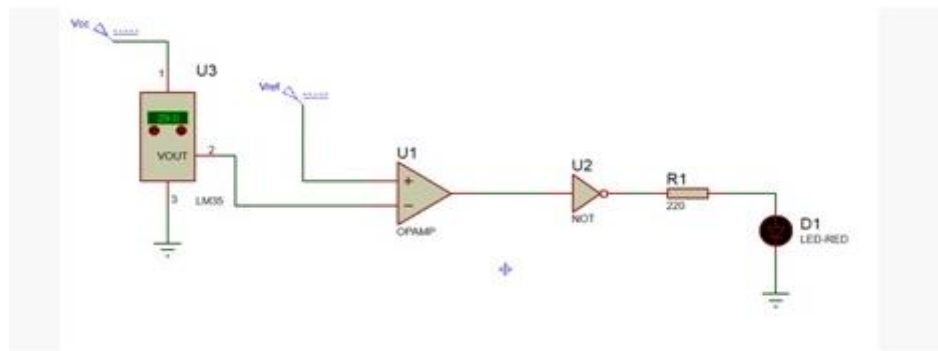
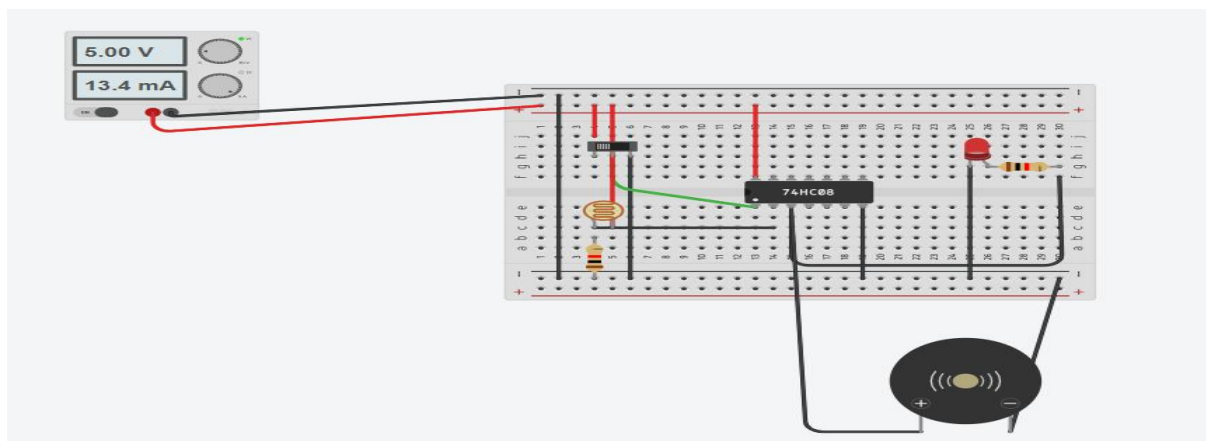
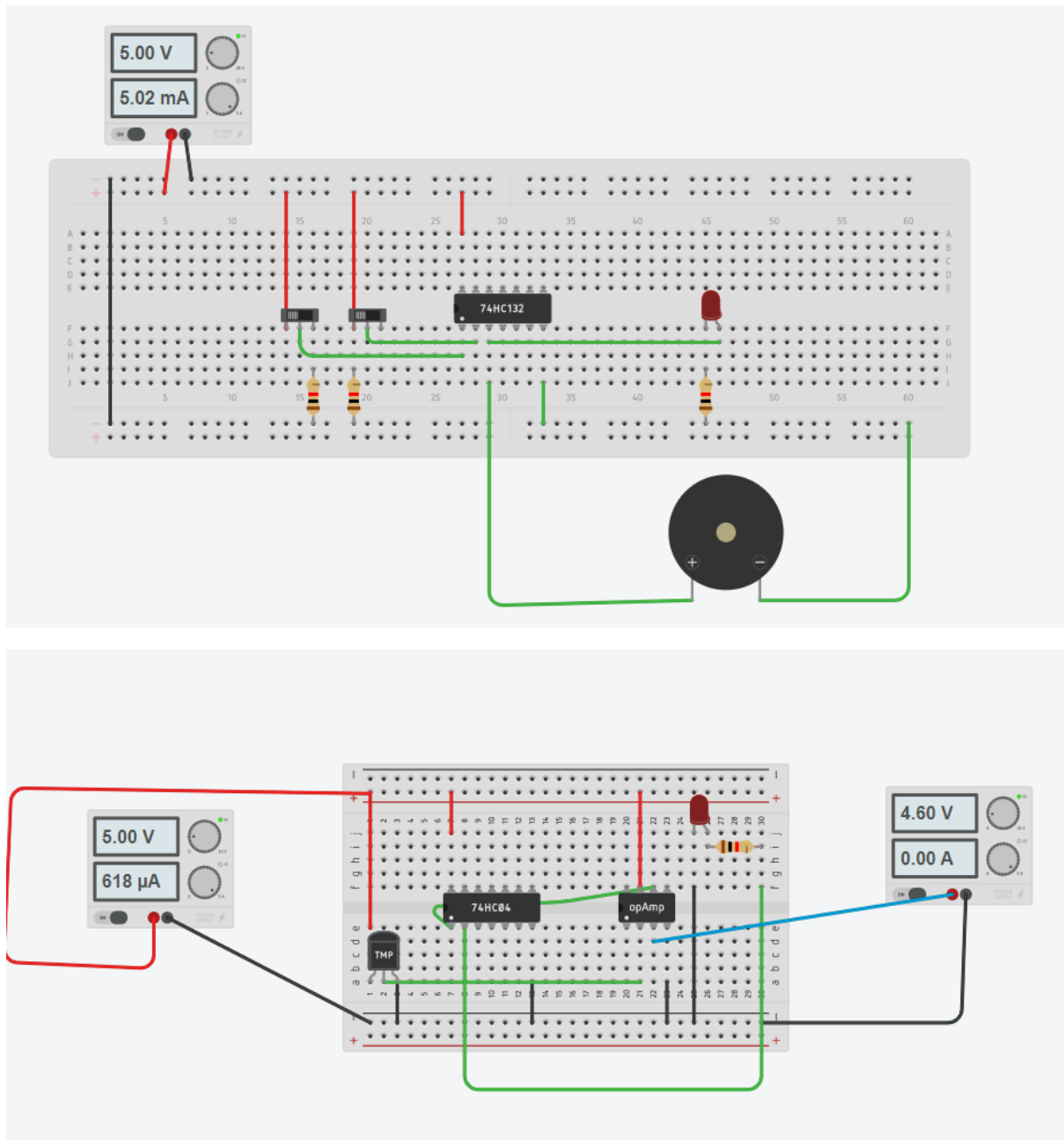


Figure: Schematic of a NOT gate circuit.

## Simulation Results:



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## Result

The integrated circuits and their connections on the breadboard were studied and implemented. The practical applications of logic gates (AND, OR & NOT) were studied and implemented.



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## Evaluation Grid:

Sr. No.	Parameters	Marks Obtained	Max Marks
1.	Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day).		10
2.	Post Lab Quiz Result.		5
3.	Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions.		5
	Signature of Faculty (with Date):	Total marks obtain	

