Welcome to our First Curriculum Meeting!

Hey There!

Welcome back to Reedy Engineering Club!

We are excited to kick off our curriculum and begin learning! Snacks will be provided at the meeting as usual.
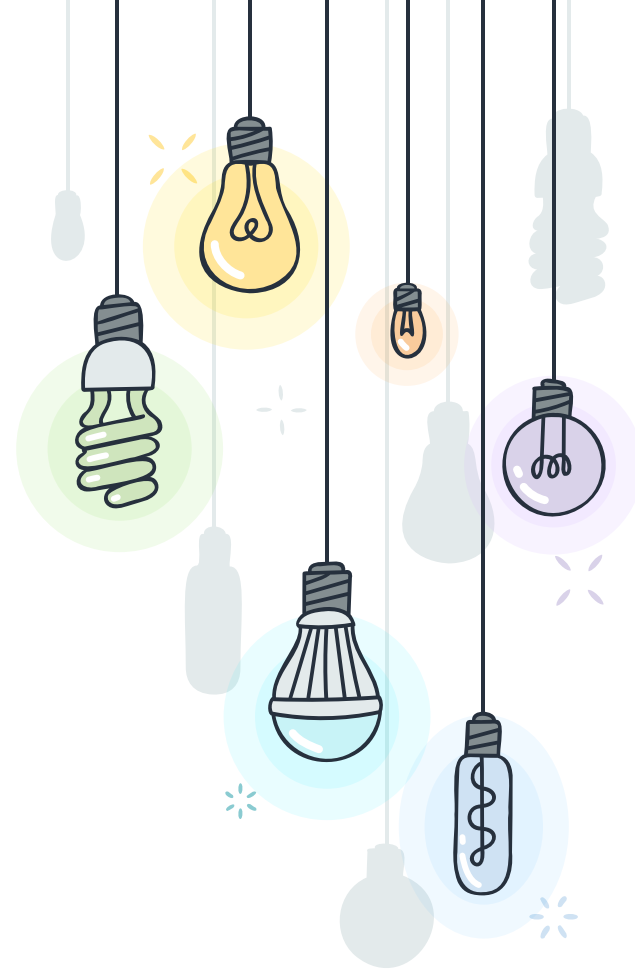
1 Officer Announcement

Get Ready!

Club officers are about to be announced!

Our Club officers

- Secretary: Airlia Vivekanand
- Outreach Officer: Nivan Mehta
- Historian: Varun Puttagunta
- Website Developer: Brandon Thames
- Social Media Manager: Siyona Vennam

Please give a round of applause for our new club officers!

2 Breadboarding Activity - Series Circuits

Overview - Breadboarding

Breadboarding is a key technique in electrical engineering where a circuit is assembled without soldering. Engineers use it to test prototypes of circuit design, making it a fundamental part of circuit development. Today, we will introduce breadboarding by creating a simple series circuit on TinkerCAD, which will have 3 LED lights illuminate.
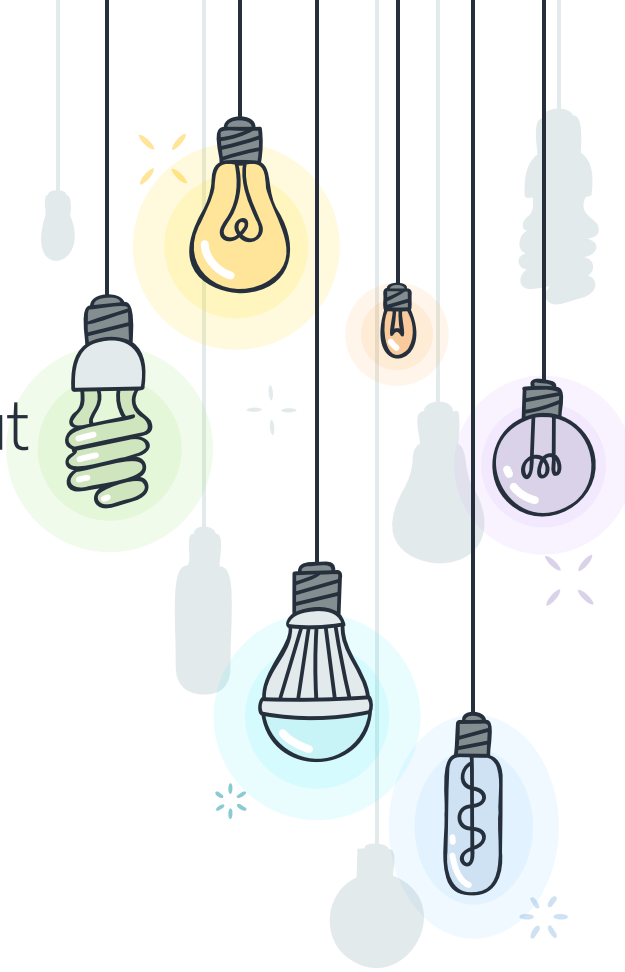
Types of Circuits - Series & Parallel

Series

- Components are connected one after another in a single path.
- The current is same through them, but voltage is different I
- f one component fails, the whole circuit fails.

Parallel

- Components are connected on separate branches,
- This means if one component fails, circuit still works.
- Same voltage throughout the circuit, but different current flows.
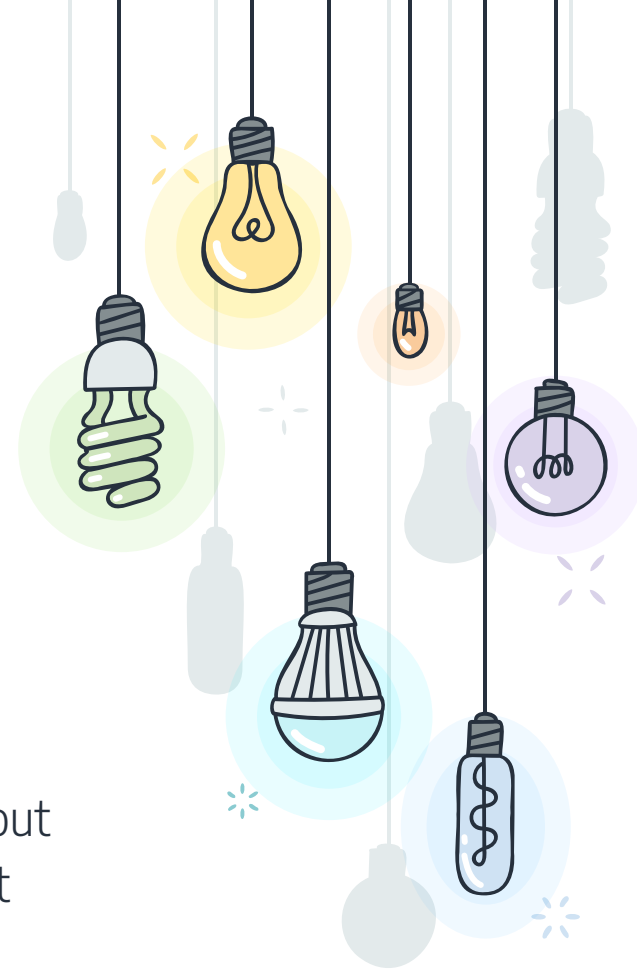
Tinkercad Setup

1. Open up your computer and go to www.tinkercad.com
2. Sign in with your Google account
3. Select Create and then select Circuits on the dropdown menu
4. Change the components sidebar to all, and add a small breadboard and power supply.
5. Connect the gray wire to the furthest end of the negative area, and do the same for the red wire to the positive area

How it should look so far:
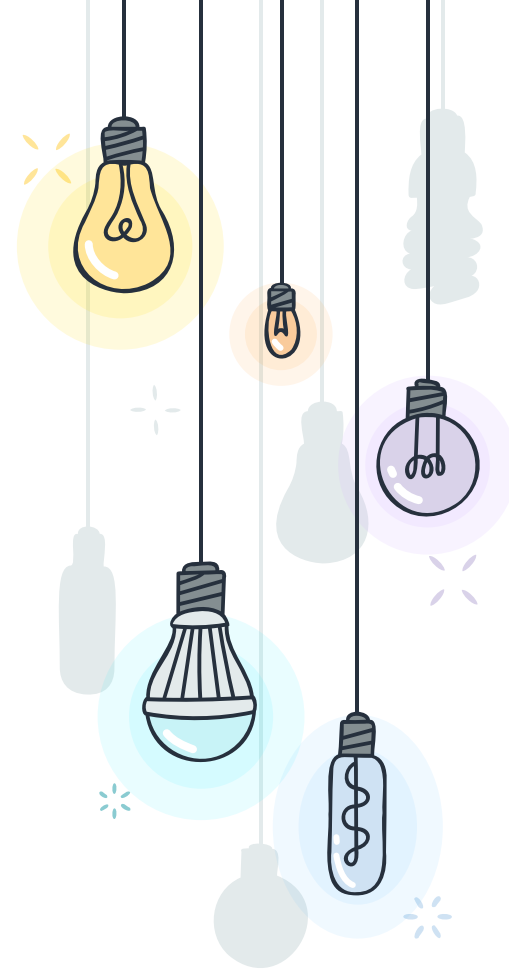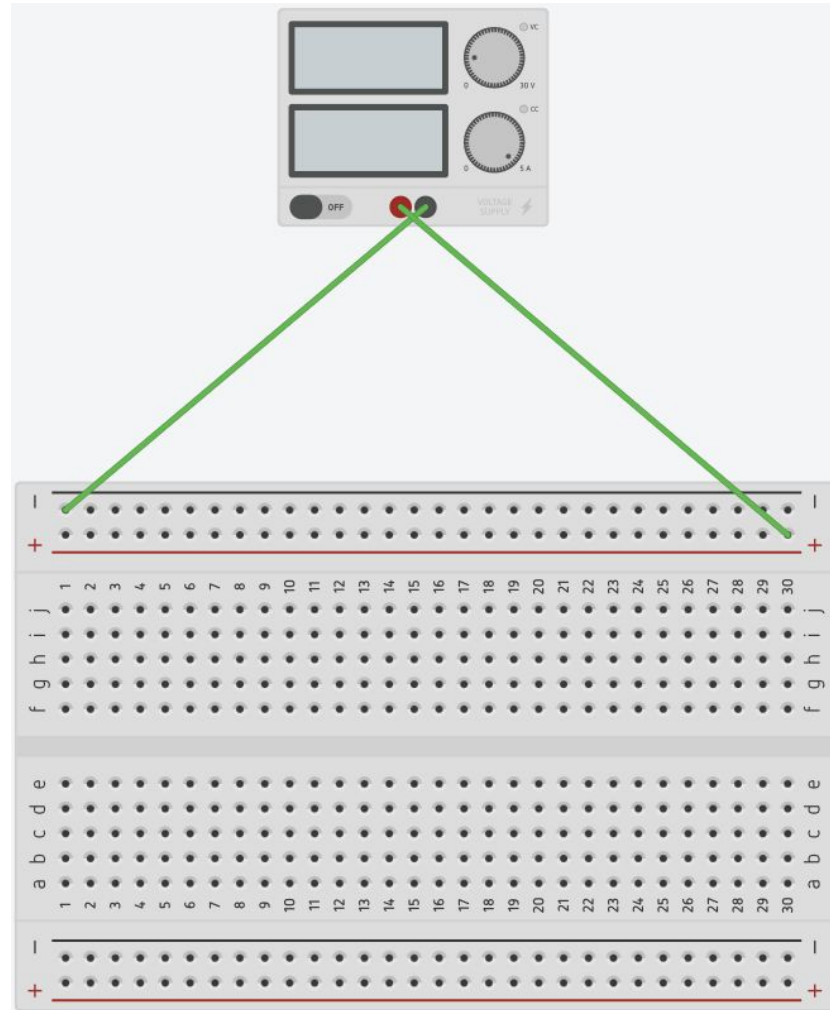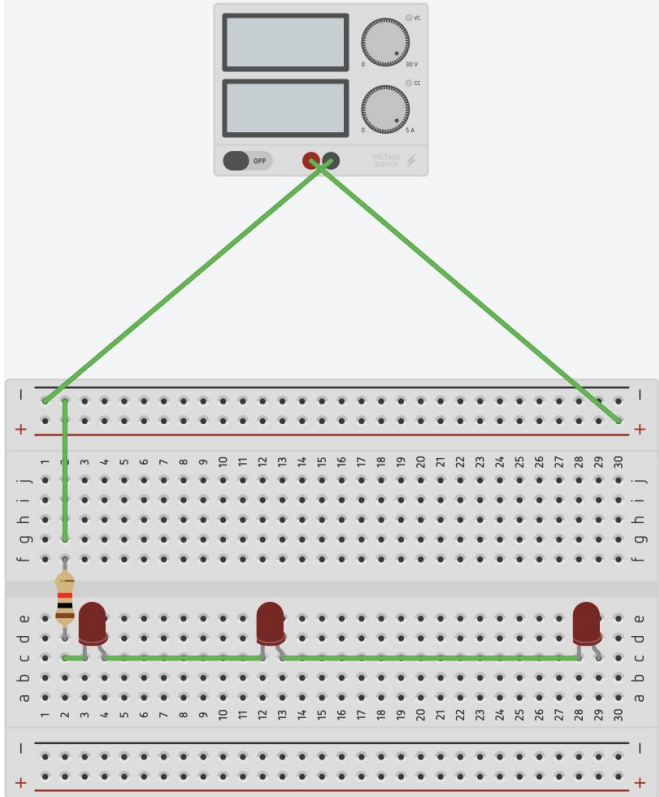
Steps - Continued

6. Connect a wire from the gray area to the G Row on the breadboard; horizontal area placing doesn't matter

7. Add a Resistor from the menu and place it from the wire to Row D; nothing should overlap

8. Add three LED from Components to Row D, with the same orientation, and connect them with wires, without any overlap
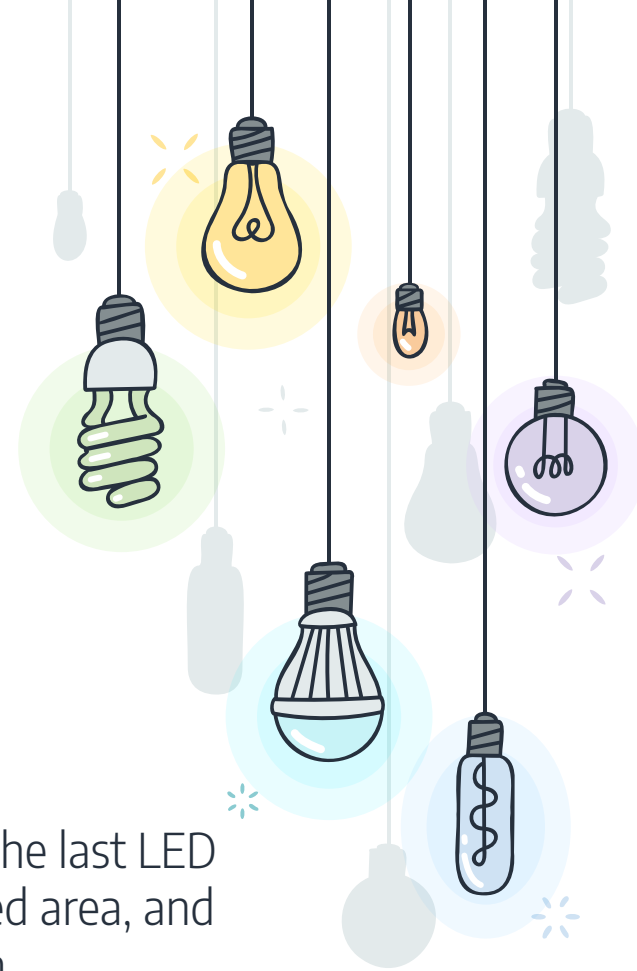
How it should look:

Final Step:
Connect a wire from the last LED light to the positive red area, and select start simulation

In Summary...

We learned about the applications and uses of breadboarding, especially for electrical engineering.

We also learned how to practically apply breadboarding and create a functioning series circuit with LEDs lighting up.

Thanks for Coming!

- Snacks are now available!
- If you've finished your board, show a leader it to get your choice of snack now.
- If not, you'll still get a snack at the end (12:40), but it won't be your preference.