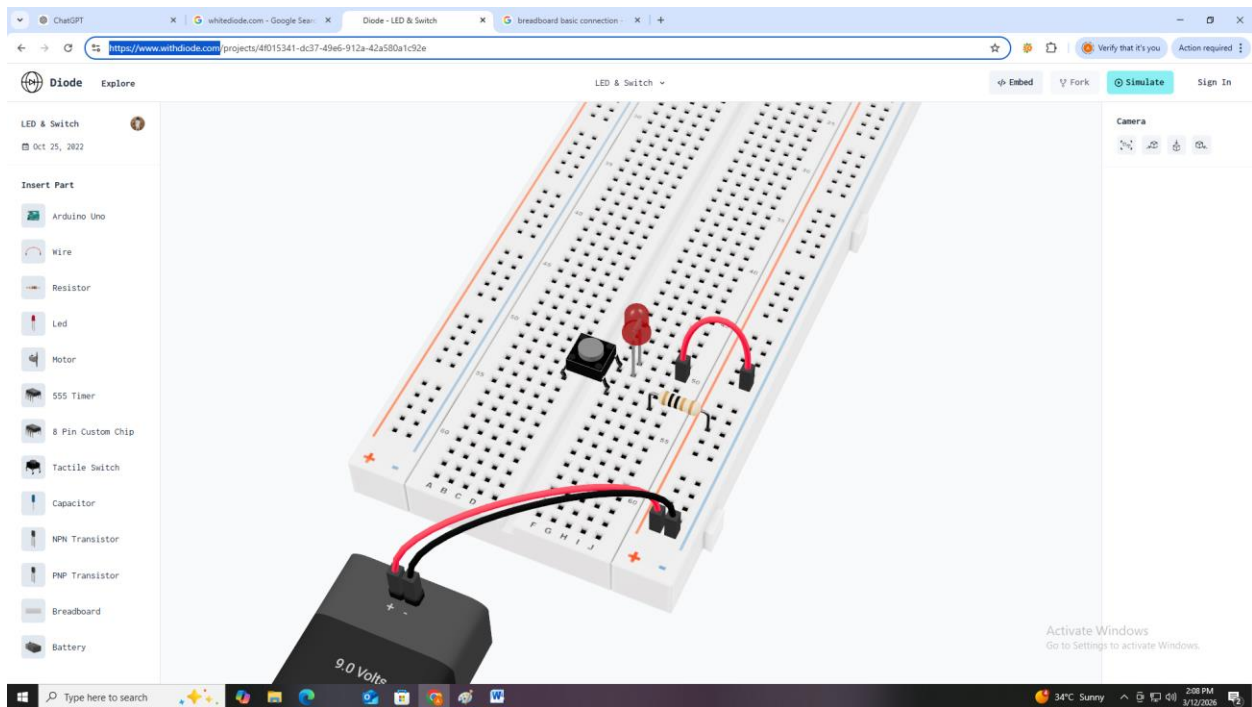


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## And Practice

### Your Setup:-

**LED** → **Push Button** → **Resistor** → **Battery +**

**LED short leg** → **Battery -**

### How it works:

1. **LED long leg** connects to one side of the **push button**.
2. **Other side of push button** connects to the **resistor**.
3. **Resistor** connects to **Battery +**.
4. **LED short leg** goes to **Battery -**.

- When you **press the push button**, the circuit is complete → **LED lights**.
- When you **release the push button**, the circuit is broken → **LED goes off**.

So yes, **LED** → **push button** → **resistor** → **Battery +** is a valid connection.

Here's a **clear breadboard layout** for your circuit where the **LED connects to the push button first, then the resistor, then battery +**, so it will work perfectly.

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### Components

- 1 LED
  - 1 Resistor (220Ω–330Ω)
  - 1 Push Button (4-pin)
  - 1 Battery (3V–9V)
  - Wires
  - Breadboard
-

## Step-by-Step Breadboard Wiring

### 1 Place the Push Button

- Put the **push button** across the **middle gap** of the breadboard.
  - Two legs on **left side**, two legs on **right side**.
- 

### 2 Place the LED

- Insert the **LED long leg (anode)** in the **same row as one leg of the push button**.
  - Insert the **LED short leg (cathode)** into a **new row** that will go to **battery -**.
- 

### 3 Place the Resistor

- Connect **one leg of the resistor** to the **other leg of the push button (opposite side)**.
  - Connect the **other leg of the resistor** to the **Battery + rail** (vertical column).
- 

### 4 Connect Battery

- **Battery +** → **resistor** → **push button** → **LED long leg** (already connected).
  - **Battery -** → **LED short leg**.
- 

### 5 Optional Wires

- Use jumper wires to connect the **battery rails** to the **main breadboard rows** if needed.
- 

### How it works

- Pressing the **push button** closes the circuit.
  - Current flows **Battery +** → **Resistor** → **Push Button** → **LED long leg** → **LED short leg** → **Battery -**
  - The **LED lights up only while pressing**.
-

## □ Quick check

- LED **long leg** → **push button** → **resistor** → **battery +**
- LED **short leg** → **battery -**
- Push button **across middle gap**
- Resistor **in series** somewhere in the loop