## **Components Required:**

- ATtiny85
- TMP36 Temperature Sensor
- LEDs (White, Red, Green, Blue, etc.)
- 220Ω Resistors (for each LED)
- 3V Coin Cell Battery
- DPST Switch
- Breadboard & Jumper Wires
- Tinkercad Simulation Platform

## About TMP36:

- TMP36 outputs analog voltage proportional to temperature.
- Output voltage is approximately:

Vout (in volts) =  $0.5 + (Temperature in °C \times 0.01)$ 

#### **Connections:**

#### TMP36:

- **Pin 1 (GND)** → ATtiny85 GND (e.g., PB3 or PB0)
- Pin 2 (Vout) → PB4 of ATtiny85 (Analog Input)
- Pin 3 (Vcc) → +3V from Coin Cell Battery (via switch)

# LEDs:

- LEDs connected to **PB0**, **PB1**, **PB2** of ATtiny85
- Cathode of each LED → through 220Ω resistor → GND

# Power Setup:

- Coin Cell Battery (+) → DPST Switch → Vcc of ATtiny85
- Coin Cell Battery (-) → GND of ATtiny85