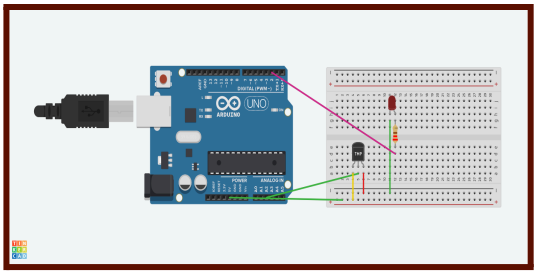
Temperature indicator

Introduction

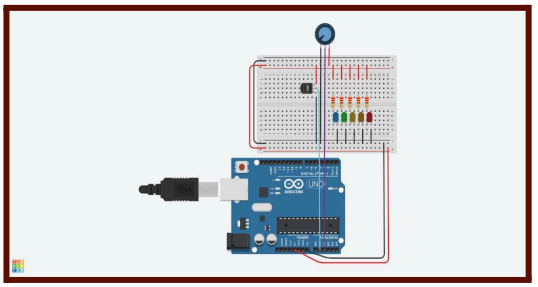
One of the most trusted signs of illness is the unnatural increase or decrease in body temperature. We get fevers because of a way to combat the illness in our system. The level at which your body might be under a fever is 38°C. Therefore, we have created a device to detect whether your body is in a state of a fever.

Proposals

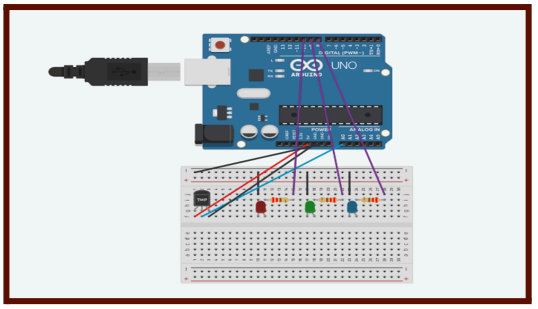
1. We have created this design to test for temperature. It detects when temperature has exceeded 38°C. The equipment used is a breadboard, arduino, led lights, temperature sensor and copper wires. The advantages are that it is portable, easy to produce and easy to read. The disadvantages of this design is that it is not child friendly, it doesn't show the temperature change by the degree and it can be affected by external temperatures.



2. We have created a circuit that detects temperature and based on a certain threshold an led will light up, there are 5 leds presumably from cold to hot A potentiometer was added in order to adjust the temperature to its desired value. This design works for thermostats in homes,fish tank heaters and any temperature regulator



3. The primary goal of this project is to develop a functional LED temperature indicator for solar panels , serving as a monitoring system for small to medium-scale enterprises and solar farms. The system, which aims to enhance solar energy efficiency and support sustainable energy solutions, includes temperature sensing, signal processing using an op-amp , an Arduino-based control unit, and an LED display that indicates temperature levels with green LEDs for optimal and red LEDs for high temperatures. The project requires tools and equipment such as green and red LEDs, an Arduino UNO, an LM741 op-amp, a temperature sensor, and resistors.



Conclusion

Through the creation of this project we can create change in one's life by identifying health issues at an instant. Our device will sense the temperature accurately and efficiently, to provide trustworthy readings.

Bibliography

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