

Initialise the arduino and specify the input and output pin.

The cycle is started, the sensor voltage is read and the measured temperature is calculated from the parameters of the thermal element.

$$\text{Temperature} = (1000 * V - V_{OC}) / TC$$

Updates the real-time curve:
If ≥ 1 second since last update Add new data point
Update graph (set XData/YData + drawnow)
Adjust axis range (x1im/y1im)

Determine the temperature range:
1. 18-24 degrees Celsius
2. Greater than 24 degrees Celsius
3. Less than 18 degrees Celsius

1. 18-24 degrees Celsius
The green light is always on.

2. Greater than 24 degrees Celsius
Red light blinks for 0.25 seconds

3. Less than 18 degrees Celsius
Yellow light blinks for 0.5 seconds

Keep working until user close the page of figure.