

Initialize:

- Set LED pin as OUTPUT
- Start serial communication

Loop forever:

- Read analog value from TMP36 (A0 pin)
- Convert raw value to voltage: $\text{value} * (5 / 1023)$
- Convert voltage to Celsius: $(\text{voltage} - 0.5) * 100$
- Print temperature (optional)
- If temperature > 30°C:
 - Turn LED ON
- Else:
 - Turn LED OFF
- Wait 500 ms