

# Lab #1 - Temperature Control

---

## Objective

---

Implement a simple proportional control system based on the output of a temperature sensor.

## Materials

---

- Micro-controller
- LM35 o LM60 (Analog temperature sensor)
- Basic Components (Resistors, capacitors, etc)
- 7 segment display or LCD monitor
- Mini fan or DC Motor
- Lighter or matches to test the temperature

Optional:

- ADC
- Operational Amplifier

Nota: These components might be needed based on your system design.

## Requirements

---

1. Build a block diagram of your control system.
  - Is it a closed-loop system or an open-loop circuit? Describe why.
2. Prove that based on a temperature change, the motor reduces or increases speed.
  - Use an oscilloscope to prove this.

## Planning

---

1. Develop requirements plan in Github.
2. Specify the responsible person per task.
3. Use Github for you code.