

## Exercise 10: Make diodes light up depending on temperature

### Equipment

For this exercise you will need:

- 1 x Arduino Uno
- 1 x TMP 36 GZ *or* LM 35 DZ
- 1 x Red LED
- 1 x Green LED
- 1 x Yellow LED
- 3 x  $\sim 60 - 220\Omega$  Resistors
- Wires

### Setup

- Connect the LEDs as in exercise 2
- Connect the TMP36GZ/LM35DZ as in exercise 9

### Questions & Exercises

**10a:** Measure the temperature changes that you are able to cause by heating the sensor with your fingers and cooling it by blowing air on it.

**10b:** Make the diodes light up depending on the measured temperature. Use these values you measured before to calibrate your sensor.

- Red = High
- Yellow = Medium
- Green = Low