Analogue signals

Very often sensors do not deliver just on or off levels but they deliver a signal level somewhere in between the supply voltage Vcc and GND. Typical examples of such sensors are

- a thermistor measuring temperature

- a photo resistor measuring light intensity

In this case the analogue signal level must be converted to a number that the computer can understand, which is done with the help of an ADC (Analogue to Digital Converter). An ADC is already available on the micro controller chip and MicroPython provides a driver that allows us to read the digital value.

We will connect a potentiometer to Vcc on one end, to GND on the other and the slider pin will be connected to the ADC. The value from the ADC is read and saved and can later be plotted. In real world experiments the sensor would simple replace the potentiometer.