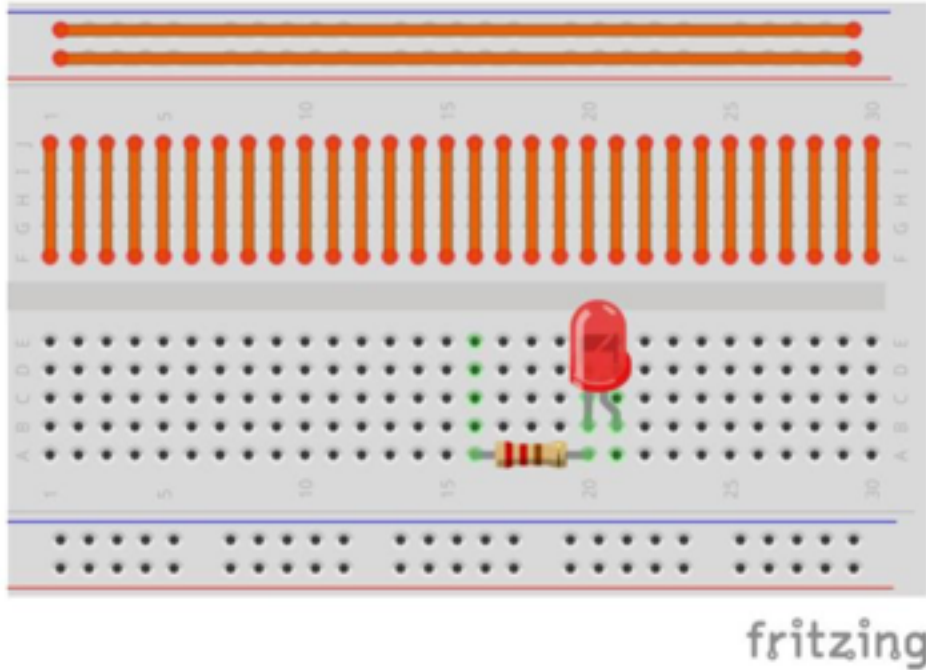




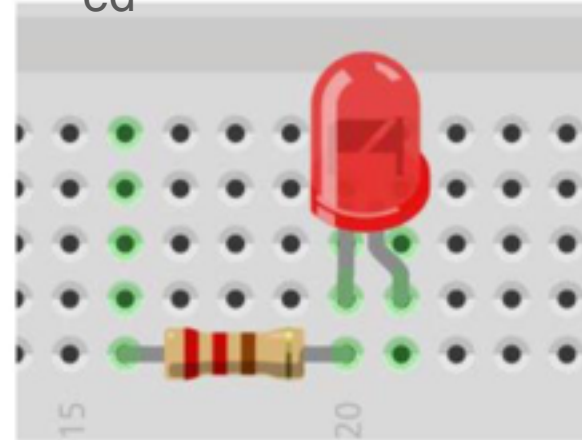
pins

Week 1 | Lesson 3

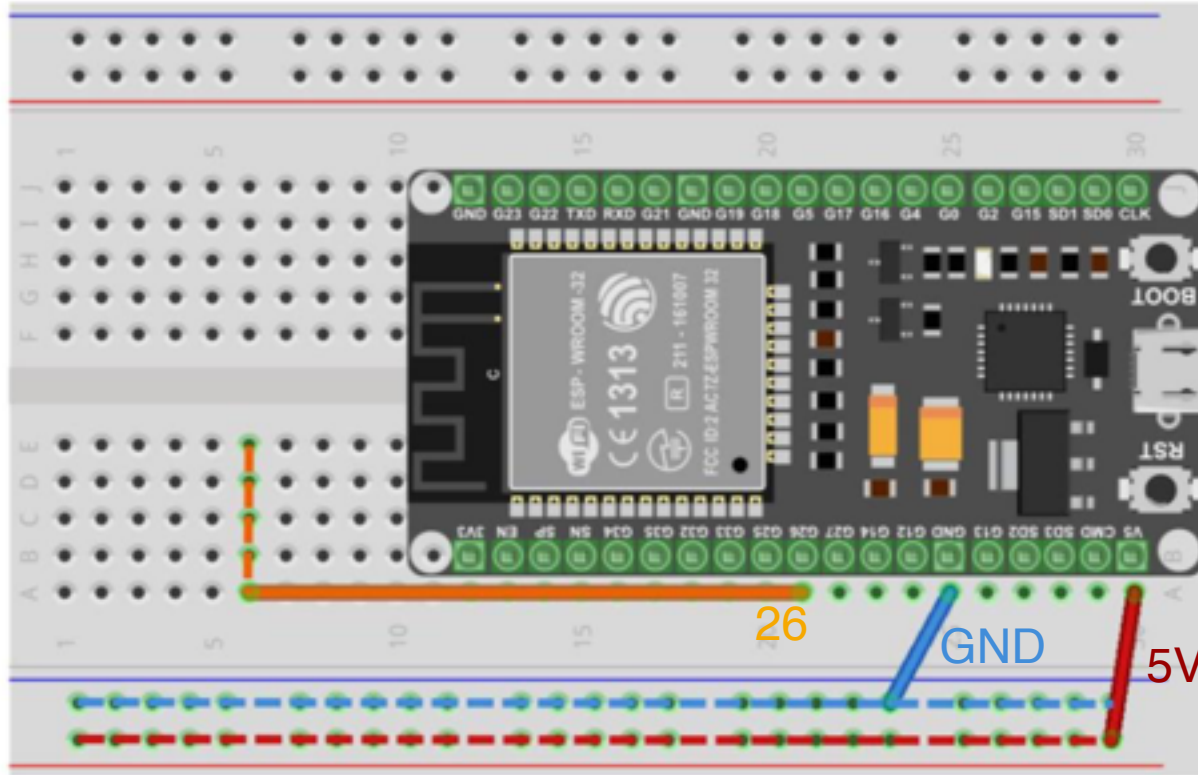
How does a plug-in board work?



- Has metal contact terminals
- Holes in rows with each other interconnected



ESP32 on the plug-in board

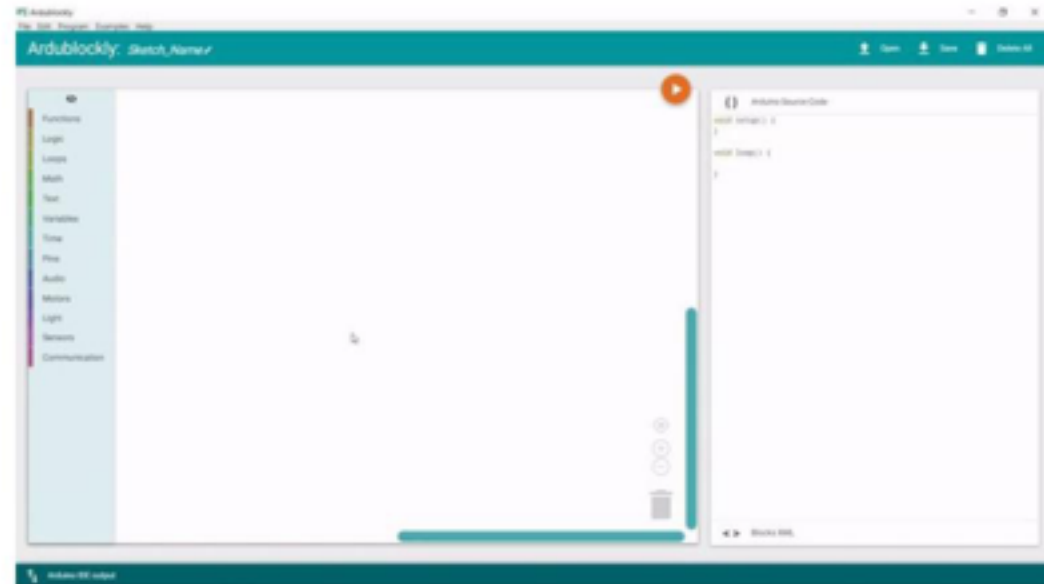


Arduino run first:

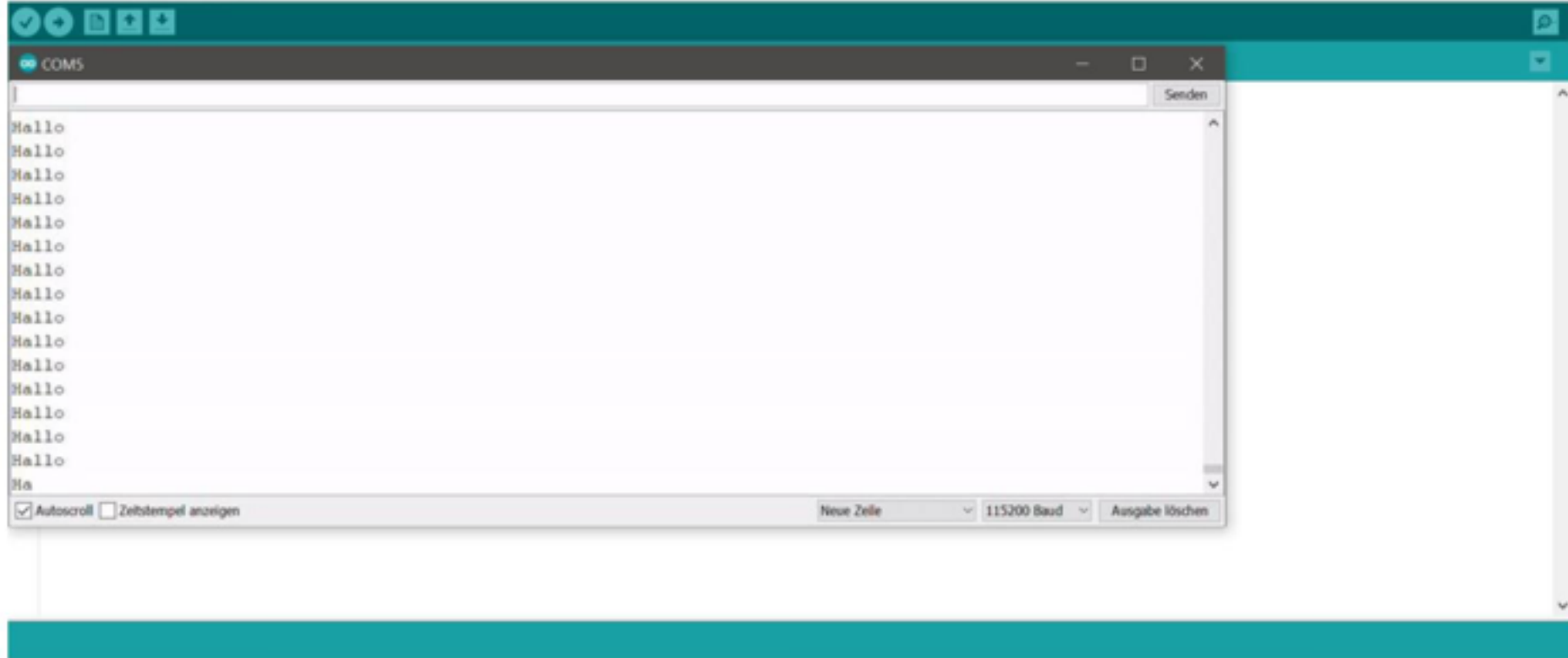
Setup serial : speed to 115200 bps

Arduino loop forever:

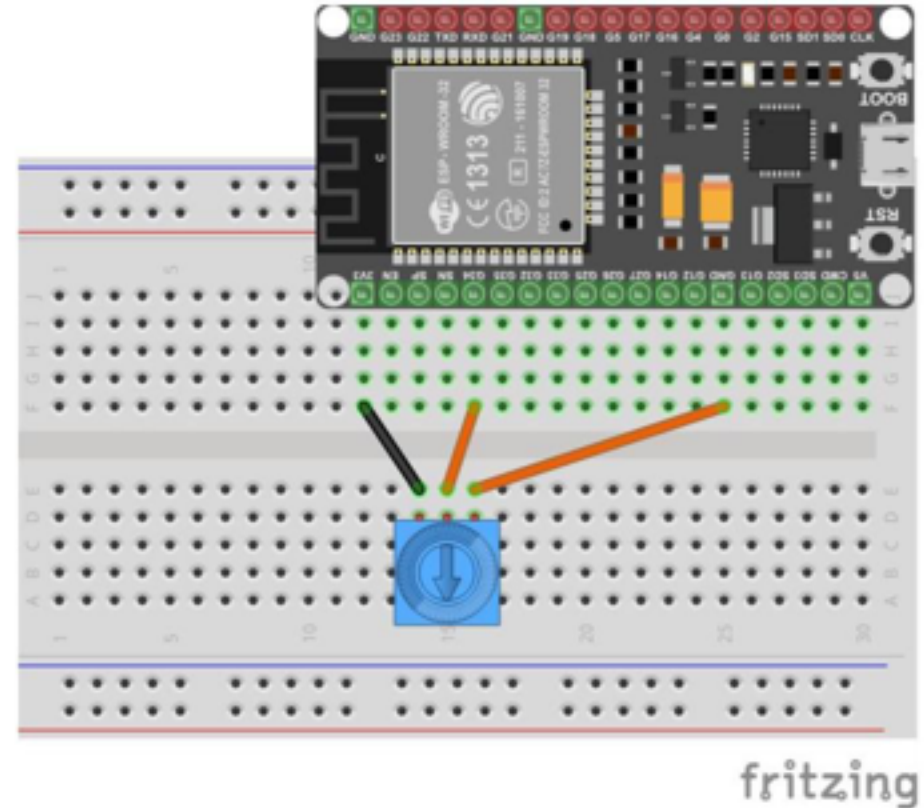
serial print "Hallo" add new line



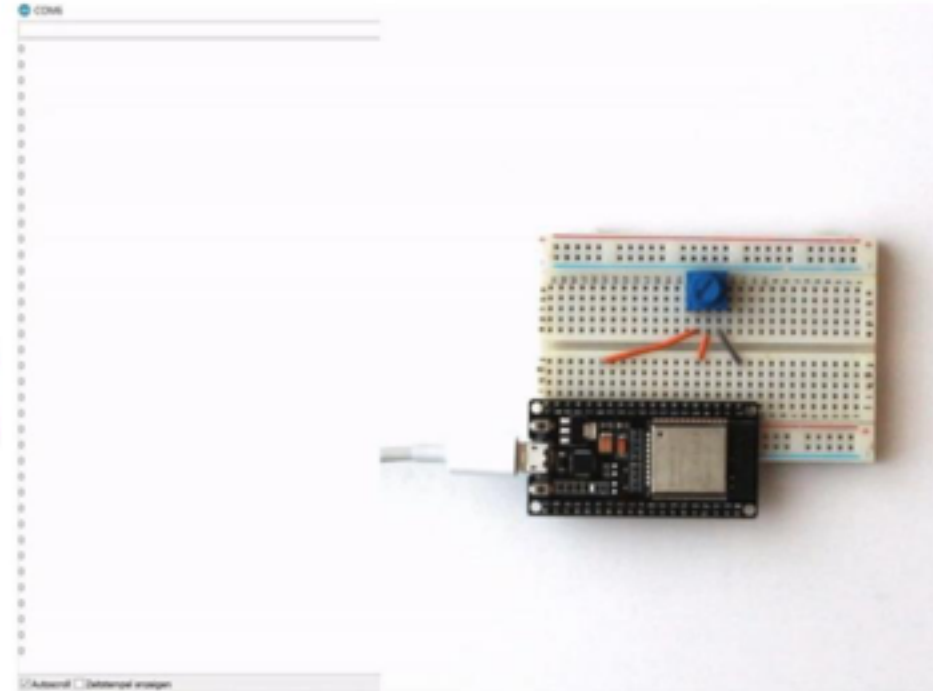
Datei Bearbeiten Sketch Werkzeuge Hilfe



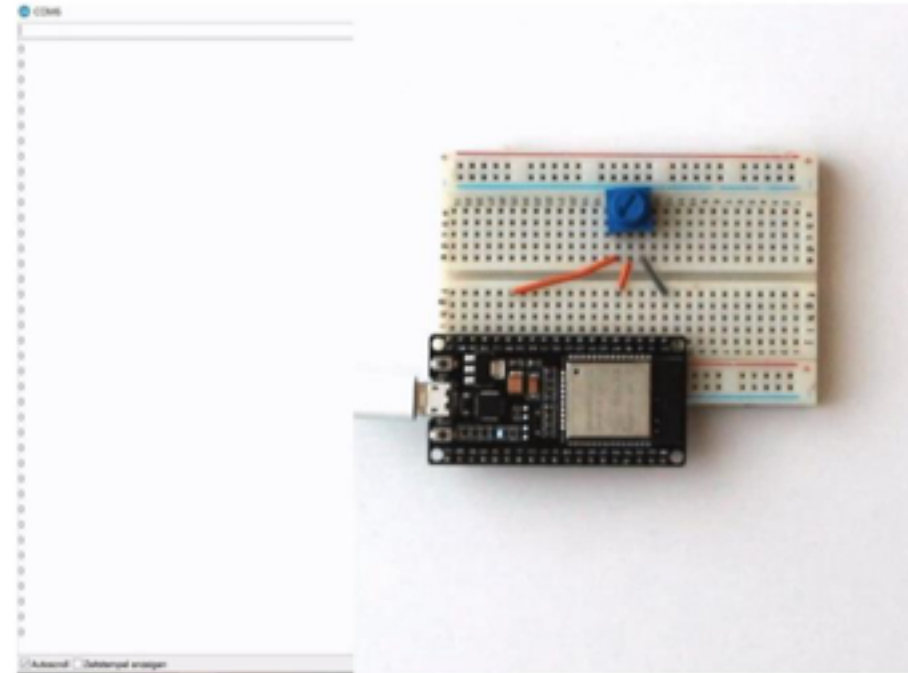
- Knob
- Resistor size by turning modifiable
- Application:
 - Volume control on the radio



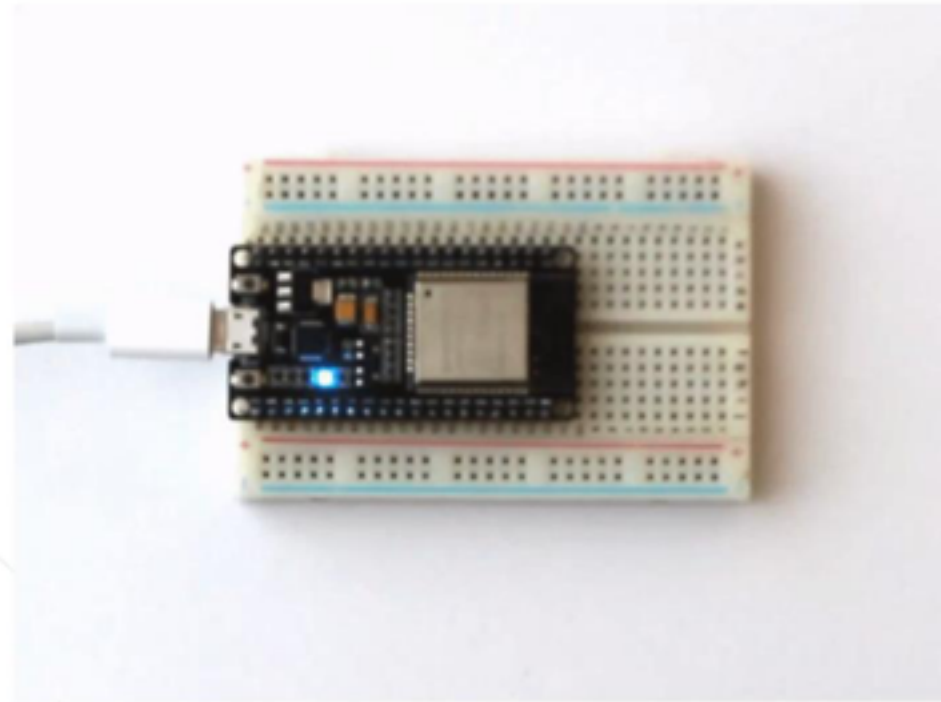
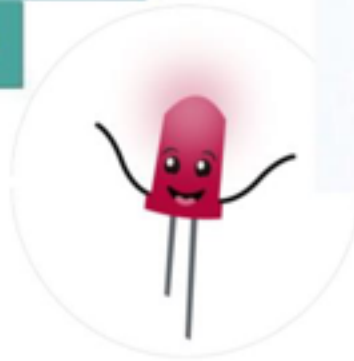
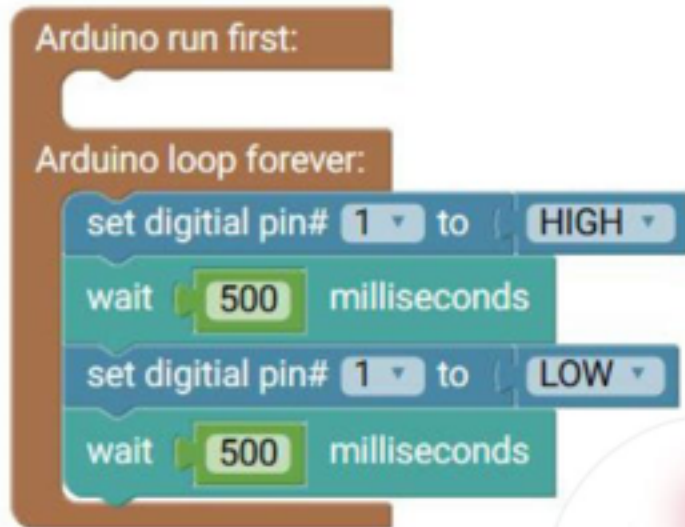
- Value range: 0 - 4095



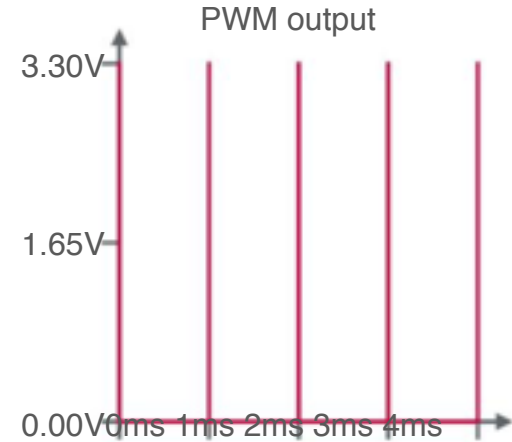
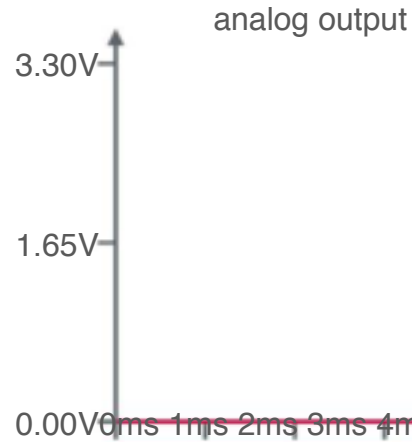
- Value range: HIGH (1) | LOW (0)



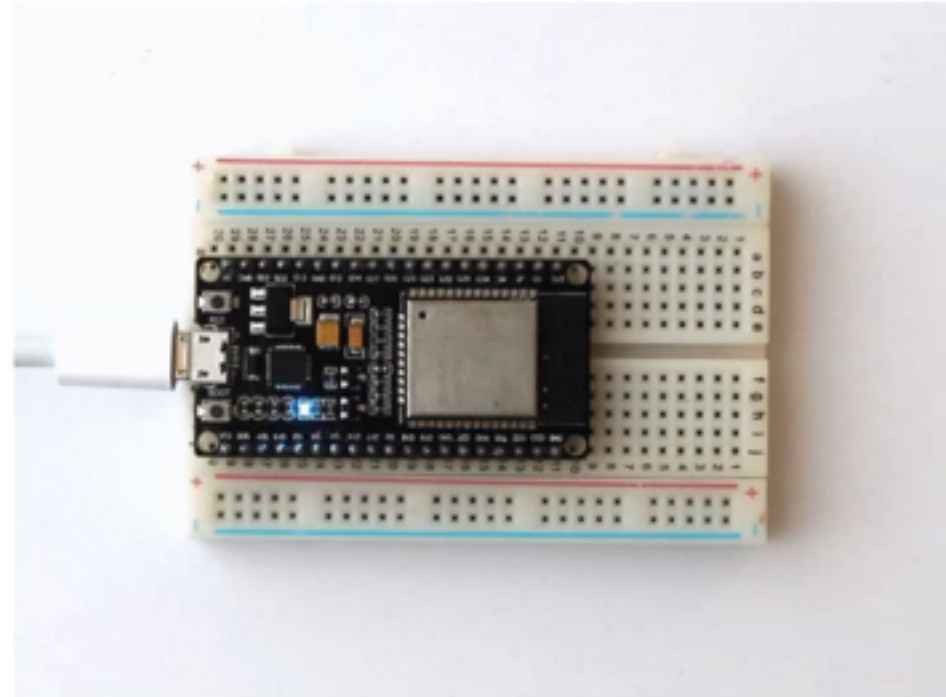
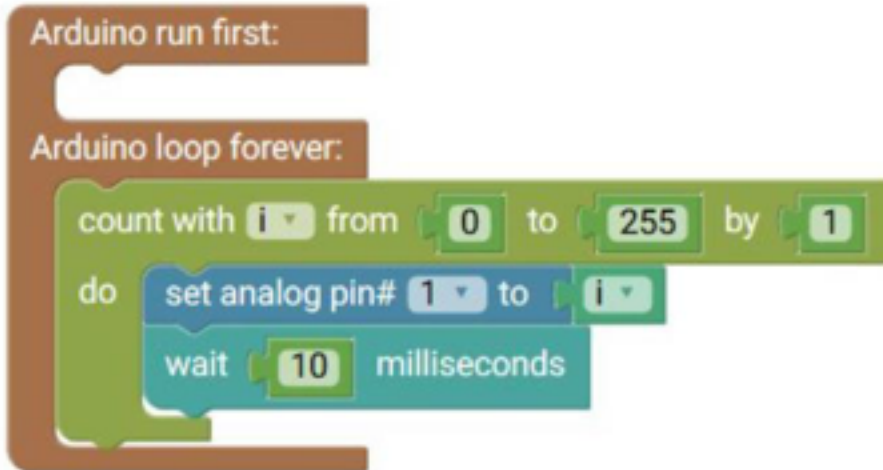
- Value range: HIGH | LOW



- So far:
 - 3.3V: AN
 - 0V: OFF
- idea: dim LED by 50%
 - 1.65V $\Leftrightarrow$ Half AN?
 - Solution: PWM
 - Value range: 0 - 255



Pulse width modulation (PWM)



- Pins = Connections
- Define in setup() whether INPUT (input) or OUTPUT (output)
- There are digital pins that can be used at the same time as the
- Only use serial pins (RX/TX) if there is no analog pins are
Serial monitor is used

