

Setup serial : speed to 300 bps

wait 1000 milliseconds

Setup stepper motor MyStepper stepper motor:
Number of pins 2
pin1# 1 pin2# 2
how many steps per revolution 100
set speed (rpm) to 10 to 10 by 1

wait 100 microseconds do set Summe to Summ

Key: " " Channel: 0 Field: 0 Value: 0

Set tone on pin # 1 at frequency 220

=

Set RGB LED myLedStrip

At position: 0

Red: 127

Green: 127

Blue: 127

Programmier-Grundlagen

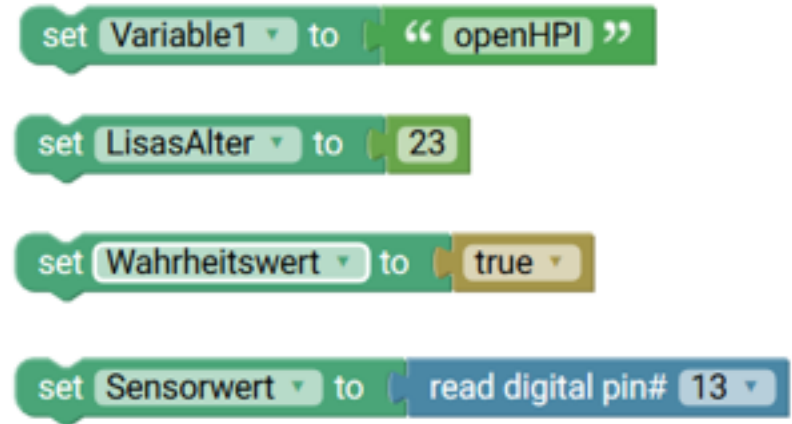
Woche 1 | Exkurs 1

- **setup():**
 - "Preparing the program."
 - Runs once at startup
 - For initializing pins:
 - Prepare engines, sensors, etc.

- **loop():**
 - "Main program"
 - Repeated execution



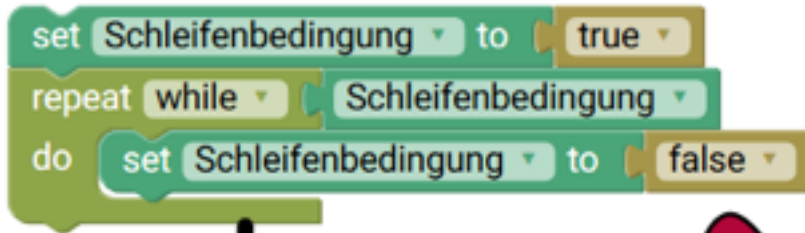
- Variables contain values
- Values can contain different:
 - Text (strings)
 - numerical values
 - Truth values (Boolean)
 - Values of input pins
- **Important:**
 - A variable may only ever contain values of **a** type.



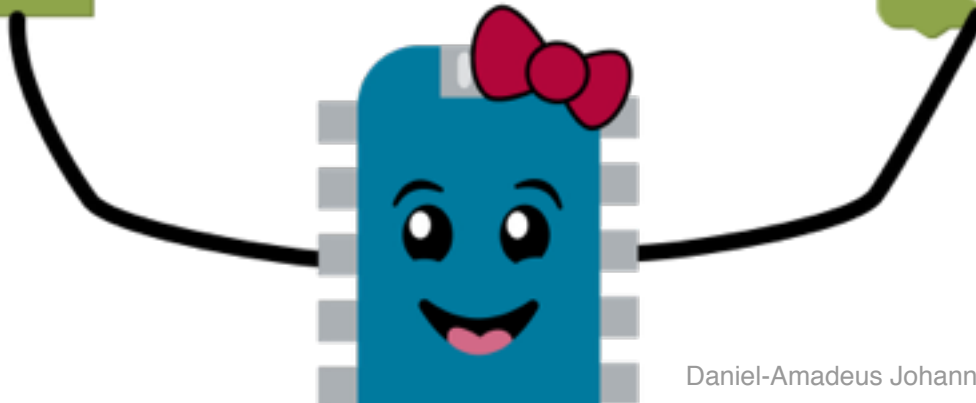
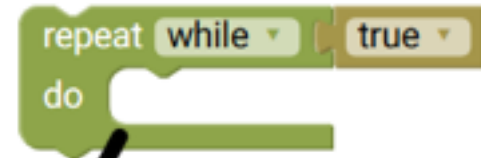
- Check conditions to create branches
- Conditions can be comparisons or the verification of a single value
- Truth value is checked:
 - true: "true" or "1"
 - wrong: "false" or "0"
- Nestable



- Repetition of the *loop body* as long as the *loop condition* is fulfilled.
- Formulate condition as before with Logic
- Nestable

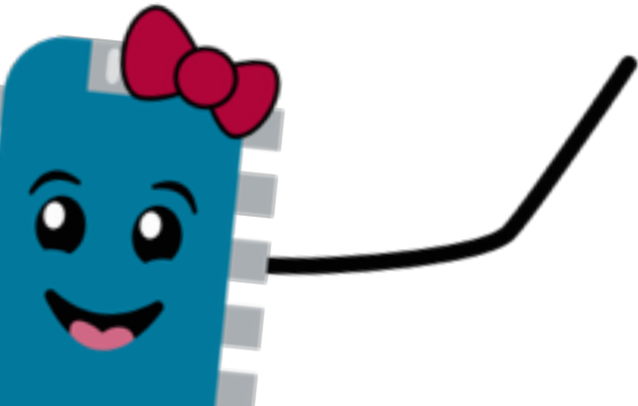
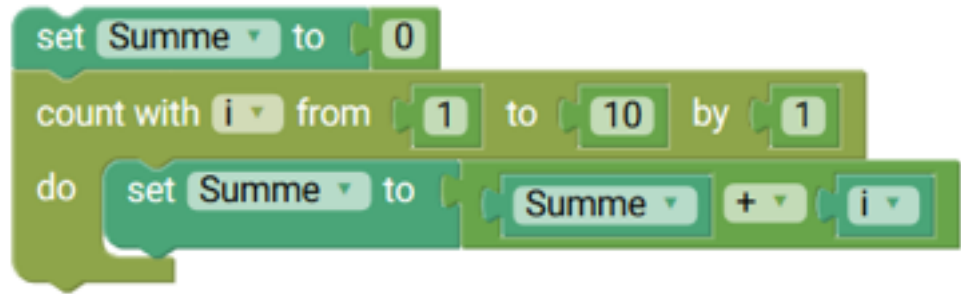


- *loop()* is an *infinite loop*





- Advantage of a counting loop with



- Standstill for the time period
 - 1000ms = 1s
- Use:
 - For delay, e.g. to let an LED light up for a certain time.
 - Move motors to a specific point
 - Use sparingly

