**# RPi.GPIO Basics cheat sheet / python**

# RPi.GPIO Official Documentation http://sourceforge.net/p/raspberry-gpio-python/wiki/Home/

**import RPi.GPIO as GPIO** # import RPi.GPIO module

# choose BOARD or BCM

**GPIO.setmode(GPIO.BCM)** # BCM for GPIO numbering

**GPIO.setmode(GPIO.BOARD)** # BOARD for P1 pin numbering

# Set up Inputs

**GPIO.setup(port\_or\_pin, GPIO.IN)** # set port/pin as an input

**GPIO.setup(port\_or\_pin, GPIO.IN, pull\_up\_down=GPIO.PUD\_DOWN)** # input with pull-down

**GPIO.setup(port\_or\_pin, GPIO.IN, pull\_up\_down=GPIO.PUD\_UP)** # input with pull-up

# Set up Outputs

**GPIO.setup(port\_or\_pin, GPIO.OUT)** # set port/pin as an output

**GPIO.setup(port\_or\_pin, GPIO.OUT, initial=1)** # set initial value option (1 or 0)

# Switch Outputs

**GPIO.output(port\_or\_pin, 1)** # set an output port/pin value to 1/GPIO.HIGH/True

**GPIO.output(port\_or\_pin, 0)** # set an output port/pin value to 0/GPIO.LOW/False

# Read status of inputs OR outputs

**i = GPIO.input(port\_or\_pin)** # read status of pin/port and assign to variable i

**if GPIO.input(port\_or\_pin):** # use input status directly in program logic

# Clean up on exit

**GPIO.cleanup()**

# What Raspberry Pi revision are we running?

**GPIO.RPI\_REVISION** # 0 = Compute Module, 1 = Rev 1, 2 = Rev 2, 3 = Model B+

# What version of RPi.GPIO are we running?

**GPIO.VERSION**

# What Python version are we running?

**import sys; sys.version**