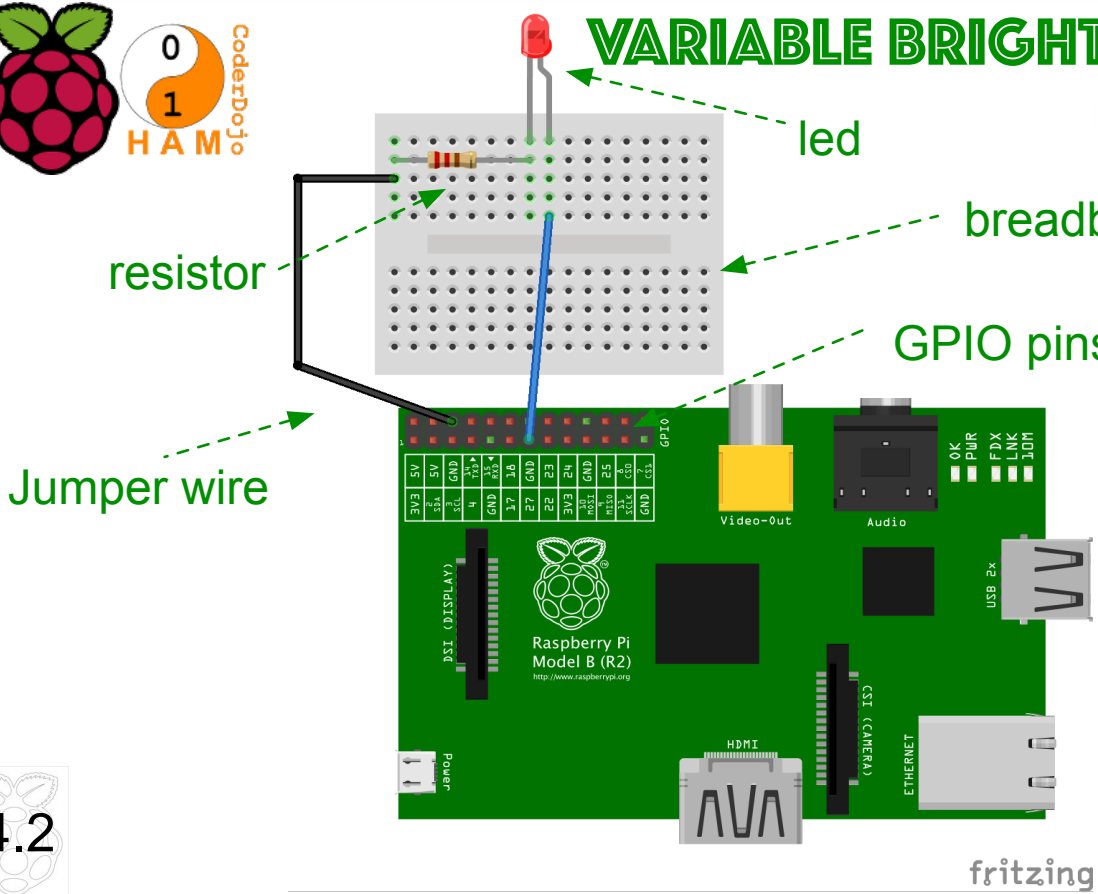
VARIABLE BRIGHTNESS LED

python™



4.2

```
from gpiozero import PWMLED
# We can use Pulse Width Modulation (PWM)
# to vary the brightness of an LED
from time import sleep

myled = PWMLED(27)
# Setting the LED's value sets its brightness
print('LED on full')
myled.value = 1 # maximum value is 1
sleep(1)

print('LED on half')
myled.value = 0.5
sleep(1)

print('LED off')
myled.value = 0
sleep(1)

print('Varying brightness')
count = 0 # set a counter
while count < 5: # Do it 5 times
    print(count)
    for x in range(1,100): #from 1 to 100
        myled.value = x/100
        sleep(0.05)
    for x in range(100,1,-1): # from 100 to 1
        myled.value = x/100
        sleep(0.05)
    count+=1 # Add 1 to our counter
```