

# lab 3 - varying intensity

```
import RPI.GPIO as GPIO

import time

GPIO.setmode(GPIO.Board)

GPIO.setup(11, GPIO.OUT)

p = GPIO.PWM(11, 100) //11 is the pin number, and 100 is the max range of PWM.

p.start(0) //Starting point of the PWM signal, you can select any value between 0 to 100.

while True:

    for x in range (0, 100, 1): //Increasing brightness of LED from 0 to 100

        p.ChangeDutyCycle(x)

        time.sleep(0.1)

    for x in range (100, 0, -1): //fading brightness of LED from 100 to 0

        p.ChangeDutyCycle(x)

        time.sleep(0.1)
```