

Displaying different LED Patterns with Raspberry P

For displaying Different LED pattern connect 8 LEDs in the same format to the pin number given in the below python Code :

CODE FOR LED PATTERN:

```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BOARD)
led1 = 29
led2 = 31
led3 = 33
led4 = 35
led5 = 36
led6 = 37
led7 = 38
led8 = 40
#setup the ledPin(i.e. GPIO22) as output
GPIO.setup(led1, GPIO.OUT)
GPIO.setup(led2, GPIO.OUT)
GPIO.setup(led3, GPIO.OUT)
GPIO.setup(led4, GPIO.OUT)
GPIO.setup(led5, GPIO.OUT)
GPIO.setup(led6, GPIO.OUT)
GPIO.setup(led7, GPIO.OUT)
GPIO.setup(led8, GPIO.OUT)
GPIO.output(led1, False)
GPIO.output(led2, False)
GPIO.output(led3, False)
GPIO.output(led4, False)
GPIO.output(led5, False)
GPIO.output(led6, False)
GPIO.output(led7, False)
GPIO.output(led8, False)

def ledpattern(ledVal1, ledVal2, ledVal3, ledVal4, ledVal5, ledVal6, ledVal7, ledVal8):
    GPIO.output(led1, ledVal1)
    GPIO.output(led2, ledVal2)
    GPIO.output(led3, ledVal3)
    GPIO.output(led4, ledVal4)
    GPIO.output(led5, ledVal5)
    GPIO.output(led6, ledVal6)
    GPIO.output(led7, ledVal7)
    GPIO.output(led8, ledVal8)
```

```
def patterOne():
    for i in range (0, 3):
        ledpattern(1, 0, 1, 0, 1, 0, 1, 0)
        time.sleep(1)
        ledpattern(0, 1, 0, 1, 0, 1, 0, 1)
        time.sleep(1)
```

```
def patternTwo():
    for i in range (0, 5):
        ledpattern(1, 0, 0, 0, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 1, 0, 0, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 1, 0, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 1, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 1, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 0, 1, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 0, 0, 1, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 0, 0, 0, 1)
        time.sleep(0.1)
```

```
def patternThree():
    for i in range (0, 5):
        ledpattern(0, 0, 0, 0, 0, 0, 0, 1)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 0, 0, 1, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 0, 1, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 0, 1, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 0, 1, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 0, 1, 0, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(0, 1, 0, 0, 0, 0, 0, 0)
        time.sleep(0.1)
        ledpattern(1, 0, 0, 0, 0, 0, 0, 0)
        time.sleep(0.1)
```

```

def patternFour():
    for i in range (0, 5):
        ledpattern(0, 1, 1, 1, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 0, 1, 1, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 0, 1, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 0, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 0, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 1, 0, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 1, 1, 0, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 1, 1, 1, 0)
        time.sleep(0.1)

```

```

def patternFive():
    for i in range (0, 5):
        ledpattern(1, 1, 1, 1, 1, 1, 1, 0)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 1, 1, 0, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 1, 0, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 1, 0, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 1, 0, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 1, 0, 1, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(1, 0, 1, 1, 1, 1, 1, 1)
        time.sleep(0.1)
        ledpattern(0, 1, 1, 1, 1, 1, 1, 1)
        time.sleep(0.1)

```

```

try:
    while True:
        patterOne()
        patternTwo()
        patternThree()
        patternFour()
        patternFive()

```

```

finally:
    #reset the GPIO Pins
    GPIO.cleanup()

```