

...cont'd

- 8 Turn on your Raspberry Pi then begin a new Python script by making attributes and methods available

```
import RPi.GPIO as GPIO  
from time import sleep
```

- 9 Add statements to use board pin numbers in the script, and set up pins 7,11 and 13 to supply power as output
- ```
GPIO.setmode(GPIO.BOARD) ; GPIO.setup(7,GPIO.OUT)
GPIO.setup(11,GPIO.OUT) ; GPIO.setup(13,GPIO.OUT)
```

- 10 Now, add a loop to sequentially light each LED for one second on each of three iterations, then reset the channels

```
i = 1
```

```
while i < 4 :
 print('Cycle: ' + str(i))
 GPIO.output(7, True);
 print('\t7 Output True - RED ON') ; sleep(1)
 GPIO.output(7, False);
 GPIO.output(11, True);
 print('\t11 Output True - YELLOW ON') ; sleep(1)
 GPIO.output(11, False);
 GPIO.output(13, True);
 print('\t13 Output True - GREEN ON') ; sleep(1)
 GPIO.output(13, False);
 i += 1
GPIO.cleanup()
```

- 11 Save the file, then enter this command to run the script with superuser privileges and see the LED sequence

```
sudo python gpio_sequence.py
```



If you miss out the loop incrementer `i+=1` it will continue to run – press `Ctrl + C` to exit the script.

The terminal window shows the command `sudo python gpio_sequence.py` being run. The output displays three cycles of LED sequences:

```
pi@raspberrypi:~ $ sudo python gpio_sequence.py
File Edit Tabs Help
pi@raspberrypi:~ $ Cycle: 1
 7 Output True - RED ON
 11 Output True - YELLOW ON
 13 Output True - GREEN ON
Cycle: 2
 7 Output True - RED ON
 11 Output True - YELLOW ON
 13 Output True - GREEN ON
Cycle: 3
 7 Output True - RED ON
 11 Output True - YELLOW ON
 13 Output True - GREEN ON
pi@raspberrypi:~ $
```