SoSLUG - GPIO Starter Kit Worksheet Random Lights

Southend-on-Sea Linux Users Group (SoSLUG)
http://www.soslug.org/

PYTHON SOFTWARE

```
# Random flashing LED - works in Python 3.2
# Same kit as Road Works Traffic lights
# Writen by Ray Eacott  23/10/2014

import RPi.GPIO as GPIO    # import GPIO library
import random
import time

GPIO.setmode(GPIO.BOARD)
GPIO.setwarnings(False)

one = 12    # GPIO pin for first LED etc
two = 16
three = 18
four = 11
five = 13
six = 15

GPIO.setup(one, GPIO.OUT)    # set pins to output
GPIO.setup(two, GPIO.OUT)
GPIO.setup(three, GPIO.OUT)
GPIO.setup(four, GPIO.OUT)
GPIO.setup(five, GPIO.OUT)
GPIO.setup(six, GPIO.OUT)

for n in range(1, 10):

    GPIO.output(one, False)      # switch off all LEDs
    GPIO.output(two, False)
    GPIO.output(three, False)
    GPIO.output(four, False)
    GPIO.output(five, False)
    GPIO.output(six, False)

    num = random.randint(1,6)    # get a random number between 1 and 6

    if num == 1:
        GPIO.output(one, True)  # switch on LED 1

    elif num == 2:
        GPIO.output(two, True)  # switch on LED 2  etc.

    elif num == 3:
        GPIO.output(three, True)

    elif num == 4:
        GPIO.output(four, True)

    elif num == 5:
        GPIO.output(five, True)

    elif num == 6:
        GPIO.output(six, True)

    time.sleep(1)    # wait for 1 second to allow display to be seen

    next
GPIO.cleanup()
```