PYTHON SOFTWARE

```python
# Dice  test rev 1

# For use with Python ver 3.2

# 13/10/2014

# Written by Ray Eacott

#  Layout of LEDs to form the dice

#   LED a                LED b


#   LED c     LED g       LED d


#   LED E                LED f


import RPi.GPIO as GPIO    # import GPIO library
import time                # import time module so we can use the sleep function
import random              # import random module


a = 12                 #  Pin number for LED a
b = 11                 #  Pin number for LED b etc
c = 16
d = 13
e = 18
f = 15
g = 21

N = 8                  #  Pin number for button


GPIO.setmode(GPIO.BOARD) # use board numbers for pins
GPIO.setwarnings(False)  # disable GPIO warnings

GPIO.setup(a, GPIO.OUT)   # set pins to output
GPIO.setup(b, GPIO.OUT)
GPIO.setup(c, GPIO.OUT)
GPIO.setup(d, GPIO.OUT)
GPIO.setup(e, GPIO.OUT)
GPIO.setup(f, GPIO.OUT)
GPIO.setup(g, GPIO.OUT)
GPIO.setup(N, GPIO.IN)
```

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Southend-on-Sea Linux Users Group (SoSLUG)
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PYTHON SOFTWARE CONTINUED

```python
for dice in range(1,100):


    while True:
        in_state = GPIO.input(N)
        if in_state == False:

            GPIO.output(a, False)      # switch off all segments
            GPIO.output(b, False)
            GPIO.output(c, False)
            GPIO.output(d, False)
            GPIO.output(e, False)
            GPIO.output(f, False)
            GPIO.output(g, False)


            num = random.randint(1,6)

            if num == 1:
                GPIO.output(g, True)


            elif num == 2:
                GPIO.output(b, True)
                GPIO.output(e, True)

            elif num == 3:
                GPIO.output(b, True)
                GPIO.output(e, True)
                GPIO.output(g, True)

            elif num == 4:
                GPIO.output(a, True)
                GPIO.output(b, True)
                GPIO.output(e, True)
                GPIO.output(f, True)

            elif num == 5:
                GPIO.output(a, True)
                GPIO.output(b, True)
                GPIO.output(e, True)
                GPIO.output(f, True)
                GPIO.output(g, True)

            elif num == 6:
                GPIO.output(a, True)
                GPIO.output(b, True)
                GPIO.output(c, True)
                GPIO.output(d, True)
                GPIO.output(e, True)
                GPIO.output(f, True)



    next
```