

ASSIGNMENT-3

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PROJECTNAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION
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PYTHONCODEFORBLINKINGLED AND TRAFFIC LIGHTS BY USING RASPBERRY PI

```
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for
now GPIO.setmode(GPIO.BOARD) # Use physical pin numbering
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set
initial value to low (off)

while True: # Run
    GPIO.output(8,
GPIO.HIGH) # Turn on
    sleep(1) # Sleep for 1 second
    GPIO.output(8,
GPIO.LOW) # Turn off
    sleep(1) # Sleep for 1 second
```

```

import RPi.GPIO
asGPIOimporttime

import
signalimport
tsys

#
SetupGPIO.setmode(GP
IO.BCM)GPIO.setup(9,
GPIO.OUT)GPIO.setup
(10,
GPIO.OUT)GPIO.setup
(11,GPIO.OUT)

# Turn off all lights when user ends
def allLightsOff(signal,frame):
    GPIO.output(9,
    False)GPIO.output(1
    0,False)GPIO.output
    (11,False)GPIO.clea
    nup()sys.exit(0)

signal.signal(signal.SIGINT,allLightsOff)

# Loop
while
True:

```

```
#RedGPIO.output(
9,True)

time.sleep(3)
# Red and
amberGPIO.output(
10,True)time.sleep(
1)

#
GreenGPIO.output(9
,
False)GPIO.output(1
0,False)GPIO.output
(11,
True)time.sleep(5)
# Amber
```

```
GPIO.output(11,  
False)GPIO.outp  
ut(10,  
True)time.sleep(2  
)  
# Amber off (red comes on at top  
of loop)GPIO.output(10,False)
```