NAME	RAKESH R
TEAM ID	PNT2022TMID16940
PROJECT TITLE	**IoT Based Safety Gadget for Child Safety Monitoring and Notification**

ASSIGNMENT-3

PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY PI

For LED:

```
import RPi.GPIO as GPIO                              # Import Raspberry Pi GPIO library

from time import sleep                               #Import 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 forever

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
```

For Traffic Lights:

```python
import Rpi.GPIO as GPIO

import time

import signal

import sys



#Setup

GPIO.setmode(GPIO.BCM)

GPIO.setup(9,GPIO.OUT)

GPIO.setup(10,GPIO.OUT)

GPIO.setup(11,GPIO.OUT)


#Turn off all lights when user ends demo

def allLightsOff(signal,framer):

    GPIO.output(9,False)

    GPIO.output(10,False)

    GPIO.output(11,False)

   GPIO.cleanup()

   sys.exit(0)

signal.signal(signal.SIGINT,allLightsOff)


#Loop forever

while True:

 #Red
```

```
GPIO.output(9,True)
Time.sleep(3)                #Red and amber
GPIO.output(10,True)
Time.sleep(1)


#Green
GPIO.output(9,False)
GPIO.output(10,False)
GPIO.output(11,True)
Time.sleep(5)                #Amber
GPIO.output(11,False)
GPIO.output(10,True)
Time.sleep(2)                #Amber off(red comes on at top of loop)
GPIO.output(10,False)
```