

ASSIGNMENT- 3

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Date	29-09-2022
Team ID	PNT2022TMID38992
Project Name	IoT Based Safety Gadget For Child Safety Monitoring
Maximum Marks	2 Marks

QUESTION- 1:

Write a python code for blinking LED and Traffic lights for Raspberry pi.

Solution :

#LED BLINKING :

```
import RPi.GPIO as GPIO from
time import sleep
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
while True: #infinite loop
GPIO.output(8, GPIO.HIGH) # Turn on
print("&quot;The LED is ON&quot;") sleep(5)
# Sleep for 5 second GPIO.output(8,
GPIO.LOW) # Turn off print("&quot;The
LED is OFF&quot;") sleep(5) # Sleep for 5
second
```

#TRAFFIC LIGHT CODE :

```
from gpiozero import LED
from time import sleep
```

```
red= LED(17) #pin numbers connected to Led's  
amber=(22) green=(27)
```

```
while True:
```

```
red.on() #RED light print("&quot;Red  
light is ON&quot;") for i in  
range(60,0,-1):  
print("&quot;Remaining time: &quot;,i)
```

```
sleep(1) red.off() amber.on() #  
AMBER light print("&quot;Yellow  
light is ON&quot;") for i in range(5,0,-  
1):  
print("&quot;Remaining time: &quot;,i)  
sleep(1) amber.off() green.on  
#GREEN light print("&quot;Green  
light is ON&quot;") for i in  
range(40,0,-1):  
print("&quot;Remaining time: &quot;,i)  
sleep(1) green.off()
```