

Assignment -3

Project title	Smart Waste Management System for Metropolitan Cities
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Question-1:

Write a python code for blinking led and traffic lights for Raspberry pi.

Solution:[BLINKING LED]

```
import RPi.GPIO as GPIO
                #import
RPi.GPIO module
import time
LED = 40
                #pin no. as per
BOARD
GPIO.setwarnings(False)
                #disable warnings
GPIO.setmode(GPIO.BOARD)
                #set pin numbering
format
GPIO.setup(LED, GPIO.OUT)
                #set GPIO as output

while True:

GPIO.output(LED,GPIO.HIGH)
    time.sleep(1)

GPIO.output(LED,GPIO.LOW)
    time.sleep(1)
```

Solution:[BLINKING TRAFFIC LIGHTS]

```
from gpiozero import Button, TrafficLights, Buzzer
from time import sleep

buzzer = Buzzer(15)
```

```
button = Button(21)
lights = TrafficLights(25, 8, 7)
```

```
while True:
    button.wait_for_press()
    buzzer.on()
    light.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
    buzzer.off()
```