IBM ASSIGNMENT-3

Smart Waste Management System for Metropolitan Cities

PYTHON CODE FOR BLINKING OF LED USING RASPBERRY PI :

```
from machine import Pin
from time import sleep
led = Pin(17, Pin.OUT)
while True:
        led.value(1)
        sleep(1)
        value(0)
        sleep(1)
```

PYTHON CODE FOR TRAFFIC LIGHT USING RASPBERRY PI :

```
import RPI.GPIO as GPIO
import time
import signal
import sys

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, frame):
    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 yellow
GPIO.output(10, True)
time.sleep(1)
# Green
GPIO.output(9, False)
GPIO.output(10, False)
GPIO.output(11, True)
time.sleep(5)
# yello
GPIO.output(11, False)
GPIO.output(10, True)
time.sleep(2)
# yellow off (red comes on at top of loop)
GPIO.output(10, False)
```