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SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES ASSIGNMENT – 3

Write a python code for blinking LED and Traffic Lights for Raspberry Pi.

(i) Python Code for Blinking LED:

```
1 #import RPi.GPIO as GPIO
2 #from gpiozero import LED
3 from time import sleep
4 #Led = LED(17)
5 while True:
6  #Led.on()
7  print("LED turned ON")
8  sleep(1)
9  #Led.off()
10  print("LED turned OFF")
11  sleep(1)
12
```

Output Window:

```
LED turned ON
LED turned OFF
```

(ii) Python Code for Traffic Lights:

```
import RPi.GPIO as GPIO
      import time
 3 import signal
4 import sys
5 #setup
                      ode(GPIO.BCM)
p(9, GPIO.OUT)
p(10, GPIO.OUT)
p(11, GPIO.OUT)
 6 GPIO.
 7 GPIO.:
 8 GPIO.
     GPIO.
10 #Turn off all lights
11 - def allLightOff(signal, frame):
12 GPIO.output(9,False)
13 GPIO.output(10,False)
                              t(11,False)
up()
14
15
            GPIO.
            GPIO.
                          (0)
            sys.
                           (signal.SIGINT, allLightsOff)
17
     signal.
18 #Forever Loop
19 while True:
20
21
22
            GPIO.
                            ut(9, True)
                             (3)
ut(10, True)
o(1)
             time.
23
            GPIO.
24
            time.s
25
             #Green
                             ut(9,False)
ut(10,False)
ut(11,True)
            GPIO.
26
27
28
29
             GPIO.
            GPIO.
                             (ŝ)
            time.
30
             #Amber
            GPIO.output(11,False)
GPIO.output(10,True)
time.sleep(2)
32
            #Amber off
GPIO.outpu
                            ut(10,False)
35
```