**Assignment-3:**

S.HARHARAN

421319106011(batch 9)

Smart waste management for metropolitan cities .

ASSESMENT-3--- Write python code for blinking LED and traffic lights for raspberry pi.

**Program for blinking LED:**

import time

import RPi.GPIO as GPIO

GPIO.setmode(GPIO.BOARD)

GPIO.setup(11, GPIO.OUT)

while True:

GPIO.output(11,True)

time.sleep(1)

GPIO.output(11,False)

time.sleep(1)

except KeyboardInterrupt:

GPIO.cleanup()

**Program for Traffic Light:**

import RPi.GPIO as GPIO

import time

ledgreen = 16

ledYellow = 12

ledRed = 23

button = 19

GPIO.setmode(GPIO.BOARD)

GPIO.setup(16, GPIO.OUT)

GPIO.setup(12, GPIO.OUT)

GPIO.setup(23, GPIO.OUT)

GPIO.setup(19, GPIO.IN, pull\_up\_down=GPIO.UP)

while True:

button\_state = GPIO.input(19)

if button\_state == True:

GPIO.output(16,True)

time.sleep(1)

GPIO.output(16,False)

GPIO.output(12,True)

time.sleep(1)

GPIO.output(12,False)

GPIO.output(23,True)

time.sleep(1)

GPIO.output(23,False)

time.sleep(1)

else:

if button\_state == False:

GPIO.output(16,False)

GPIO.output(12,False)

GPIO.output(23,False)

time.sleep(1)

except KeyboardInterrupt:

GPIO.cleanup()