TEAM ID – PNT2022TMID53973

ASSIGNMENT - 3

1.python code for blinking LED for Raspberry pi.

import RPL GPIO as GPIO

import time

#assign numbering for the GPIO using BCM

GPIO. Set mode(GPIO.BCM)

#assign numbering for the GPIO using Board

Crt=0

MAIL\_CHECK\_FREQ =1

#change LED status every 1 seconds

RED\_LED = 4

GPIO .setup(RED\_LED,GPIO.OUT)while

True:

If crt == 0:

GPIO. output(RED\_LED ,false)

Crt = 1

Else:

GPIO. Output(RED\_ LED ,true)

crt = 0

Time. sleep(MAIL\_CHECK\_FREQ)

GPIO. cleanup()

2. python code for traffic lights for Raspberry pi.

import RPL GPIO as GPIO

import time

def light Traffic(led1,led2,led3,delay):

GPIO .output(led1,1)

Time .sleep(delay)

GPIO .output(led1,0)

GPIO. output(led2,1)

Time. sleep(delay)

GPIO. output(led2,0 )

Time. sleep(delay)

Time. sleep(delay)

GPIO. output(led3,0 )

GPIO. Set mode (GPIO.BCM)

button =19

GPIO. setup(button, GPIO .IN,

Pull\_ up\_ down=GPIO.PUD\_UP)led Green = 16 led yellow =

12 led Red = 23

GPIO. setup(led green ,GPIO.OUT)

GPIO. setup(led yellow ,GPIO.OUT)

GPIO. Setup ( led Red ,GPIO.OUT)

While true:

Input\_ state = GPIO. input(button)if

Input\_ state == false:

Print(‘button pressed’)

Light traffic(ledgreen,ledyeloow,ledred,1)

Else :

GPIO. output(ledgreen,0)

GPIO. output(ledyellow,0)

GPIO. output(ledred,0)

Except keyboard interrupt:

Print

“you’ve exited the program”

Finally:

GPIO.cleanup()