Assignment -3

Python Programming

Assignment Date	28 September 2022
Student Name	Mr.Surenthiran K N
Student Roll Number	727819TUEC239
Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi. Only python code is enough, no need to execute in raspberry pi.

python program to blink a Led for Raspberry pi

import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library from time import sleep # Import the sleep function from the time module GPIO.setwarnings(False) # Ignore warning for now GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off) while True: # Run forever GPIO.output(8, GPIO.HIGH) # Turn on sleep(1) # Sleep for 1 second GPIO.output(8, GPIO.LOW) # Turn off sleep(1) # Sleep for 1 second

Python program for traffic light for Raspberry pi

> from gpiozero import Buzzer from gpiozero import Button from gpiozero import LED from time import sleep button = Button (21)

buzzer = Buzzer (15)
redled = LED(25)
yellowled = LED(8)
greenled = LED(7)

while True: if button.is_pressed:

redled.on()
buzzer.on()
sleep(2)
redled.off()
buzzer.off()
yellowled.on()
sleep(2)
yellowled.off()
greenled.on()
sleep(2)
greenled.off()

break