## Assignment -3

## **Python Programming**

Assignment Date	28 September 2022
Student Name	Bharath Kumar S
Student Roll Number	7179KCTKCTKCTKCTKCTT19BEC043
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