**ASSIGNMENT 3**

**Python Programming**

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| Assignment Date | 11 October 2022 |
| Student Name | VIJAY K V J |
| Student Roll Number | 111519106174 |
| Maximum Marks | 2 Marks |

**Question-1:**

**Write a python code blinking a LED for Raspberry Pi.**

***CODE:***

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*

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*

**Question-2:**

**Write a python code Traffic lights for Raspberry Pi.**

***CODE:***

from gpiozero import Button, TrafficLights, Buzzer

from time import sleep

buzzer = Buzzer(15)

button = Button(21)

lights = TrafficLights(25, 8, 7)

while True:

button.wait\_for\_press()

buzzer.on()

light.green.on()

sleep(1)

lights.amber.on ()

sleep(1)

lights.red.on()

sleep(1)

lights.off()

buzzer.off()