ASSIGNMENT-3

PYTHON PROGRAMMING

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| Assignment Date | 05 october 2022 |
| Student Name | Ms Sindhu G |
| Student Roll Number | 2127190801076 |
| Maximum Marks | 2 Marks |

**Question:**

**Write python code for blinking LED and Traffic lights for Raspberry pi.**

**Blinking Led:**

import RPI.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW)

while True:

GPIO.output(7, GPIO.HIGH)

print("LED on")

sleep(1)

GPIO.output(7, GPIO.LOW)

print("LED off")

sleep(1)

Traffic Light:

import RPi.GPIO as GPIO

import time

try:

deflightTraffic(led1, led2, led3, delay):

GPIO.output(led1, 1)Print("GREEN") time.sleep(delay)

GPIO.output(led1, 0)

GPIO.output(led2, 1) Print("YELLOW")

time.sleep(delay)

GPIO.output(led2, 0) GPIO.output(led3, 1)

Print("RED") time.sleep(delay)

OGPIO.output(led3, 0)

GPIO.setmode(GPIO.BCM) button 19

GPIO.setup(button, GPIO.IN, pull\_up\_down-GPIO.PUD\_UP)

ledGreen - 16

led Yellow 12

ledRed-23

GPIO.setup(ledGreen, GPIO.OUT)

GPIO.setup(led Yellow, GPIO.OUT)

GPIO.setup(ledRed, GPIO.OUT) while True:

input\_state= GPIO.input(button)

if input state-False:

print('Button Pressed') light Traffic(ledGreen, led Yellow, ledRed, 1)

else:

GPIO.output(led Green, 0)

GPIO.output(ledYellow, 0) GPIO.output(ledRed, 0)

except KeyboardInterrupt:

print "You've exited the program"

finally:

GPIO.cleanup()