**Assignment -3**

Python Programming for Raspberry Pi

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| Assignment Date | 1 September 2022 |
| Student Name | MUTHU VIGNESH |
| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for Blinking LED for Raspberry Pi.

import RPi.GPIO as GPIO import time ledPin = 17 def setup():

GPIO.setmode(GPIO.BOARD) # Numbering of Pins

GPIO.setup(ledPin, GPIO.OUT) # Set ledPin as output

GPIO.output(ledPin, GPIO.LOW) # Set ledPin to LOW to turn Off the

LED def loop(): while True: print 'LED on'

GPIO.output(ledPin, GPIO.HIGH) # LED On time.sleep(3.0) # wait 3 sec print 'LED off'

GPIO.output(ledPin, GPIO.LOW) # LED Off time.sleep(3.0) # wait 3 sec def endprogram():

GPIO.output(ledPin, GPIO.LOW) # LED Off

GPIO.cleanup()

if \_\_name\_\_ == '\_\_main\_\_':

setup() try:

loop()

except KeyboardInterrupt: #'Ctrl+C' is pressed, the destroy() will be executed. endprogram()

**Question-2:**

Write python code for Traffic Lights Simulation for Raspberry Pi.

**Traffic Light Simulation - Python Code for Raspberry Pi.**

**from gpiozero import Button, TrafficLights, Buzzer from time import sleep buzzer = Buzzer(17) button = Button(21) lights = TrafficLights(26, 9, 5) while True:**

**button.wait\_for\_press() buzzer.on() light.green.on() sleep(3) lights.amber.on() sleep(3) lights.red.on() sleep(3) lights.off() buzzer.off()**