Assignment - 3

Python Programming

| Assignment Date | 1 October 2022 |
|---------------------|-----------------|
| Student Name | SANTHOSHKUMAR M |
| Student Roll Number | 812119104029 |
| Maximum Marks | 2 Marks |

Question-1:

Write a python code blinking a LED for Raspberry pi

Solution:

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 (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

Question-2:

Write a python code Traffic lights for Raspberry pi

Solution:

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()