Assignment -3

Python Programming

Assignment Date	06 October 2022
Student Name	M.Harini
Student Roll Number	811519106049
Maximum Marks	2 Marks

Question-1:

Write a python code for led blinking in

raspberry pi SOLUTION:

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

```
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import RFI.GFIO as GFIO # Import Raspberry Pi GFIO library
from time import sleep # Import the sleep function from the time module

GFIO.setwarnings(False) # Ignore warning for now
GFIO.setwode(GFIO.BOARD) # Use physical pin numbering
GFIO.setup(8, GFIO.OUT, initial=GFIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True: # Run forever
GFIO.output(8, GFIO.HIGH) # Turn on
sleep(1) # Sleep for 1 second

GFIO.output(8, GFIO.LOW) # Turn off
sleep(1) # Sleep for 1 second
```

```
Question-2:
Write a python code for traffic light in raspberry
pi SOLUTION:
            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()
File Edit Format Run Options Window Help 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.red.on()
sleep(1)
lights.off()
buzzer.off()
```