Assignment - 3

Python Programming

Assignment Date	1 October 2022
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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

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buzzer = Buzzer(15)
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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()