Assignment - 3

Python Programming

Assignment Date	17 November 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

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()
```