Assignment -3

Python Programming

Assignment Date	06 October 2022
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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
```

```
File  Edit  Format  Run  Options  Window  Help
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 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()
```

```
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.off()
        buzzer.off()
```

```
sleep(1)
lights.amber.on()
sleep(1) lights.red.on()
sleep(1)
lights.off()
buzzer.off()
```