Assignment -3

Python Programming

Assignment Date	02 October 2022
Student Name	Praveen P
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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
l ow (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

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