Assignment -3
Python Programming

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()
```