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(9, GPIO.OUT, initial=GPIO.LOW) # Set pin 9 to be an output pin and set initial value to low (off)

while True: # Run forever

GPIO.output(9, GPIO.HIGH) # Turn on

sleep(1) # Sleep for 1 second

GPIO.output(9, 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(9, GPIO.OUT, initial=GPIO.LOW) # Set pin 9 to be an output pin and set initial value to low (off)

while True: # Run forever
GPIO.output(9, GPIO.HIGH) # Turn on
sleep(1) # Sleep for 1 second
GPIO.output(9, 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(10)
button = Button(11)
lights = TrafficLights(23, 9, 5)
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()
    from gpiozero import Button, TrafficLights, Buzzer
    from time import sleep
    buzzer = Buzzer(10)
    button = Button(11)
    lights = TrafficLights(23, 9, 5)
    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()
```