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

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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:

```python
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()
```

```python
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```