Assignment -3

Python Programming

Assignment Date	29 September 2022
Student Name	Abirami S
Student Roll Number	513419106002
Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi (Only python code is enough,no need to execute in raspberry pi).

Solution:-

Python Code for Blinking LED:

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

Python code for Traffic Lights:

```python
from gpiozero import LED

from time import sleep


red = LED(22)

amber = LED(27)

green = LED(17)

while True:

    red.on()

    sleep(1)

    amber.on()

    sleep(1)

    green.on()

    sleep(1)

    red.off()

    sleep(1)

    amber.off()

    sleep(1)

    green.off()
```