Assignment -3

Raspberry PI

Assignment Date	29 September 2022
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Maximum Marks	2 Marks

Question 1 :

Write a python code for blinking LED for Raspberry PI

Solution

```
import RPi.GPIO as GPIO
from time import sleep

GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)

"""
LED Interfacing
LED at Pin 7
"""

ledPin = 7

GPIO.setup(ledPin, GPIO.OUT, initial=GPIO.LOW)
while True:
    GPIO.output(ledPin, GPIO.HIGH)
    sleep(1.5)
    GPIO.output(ledPin, GPIO.LOW)
    sleep(1.5)
```

Question 2 :

Write a python code for traffic lights for Raspberry PI

Solution

```
import RPi.GPIO as GPIO
from time import sleep

GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)

"""
Traffic Light Interfacing
LEDs - Pin ; RED - 5 ; YELLOW - 6 ; GREEN - 13
```

```python
"""

red = 5
yellow = 6
green = 13

GPIO.setup(red, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(yellow, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(green, GPIO.OUT, initial=GPIO.LOW)

while 1:
    GPIO.output(red, GPIO.HIGH)
    sleep(3)
    GPIO.output(red, GPIO.LOW)
    GPIO.output(yellow, GPIO.HIGH)
    sleep(1)
    GPIO.output(yellow, GPIO.LOW)
    GPIO.output(green, GPIO.HIGH)
    sleep(3)
    GPIO.output(green, GPIO.LOW)
    GPIO.output(yellow, GPIO.HIGH)
    sleep(1)
```