Assignment -3

Python Programming

Assignment Date	21 October 2022
Student Name	Pakkiya S
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Maximum Marks	2 Marks

Question:

Write a python code for blinking LED and traffic light for raspberry Pi

Program For Blinking LED:

```python
import time
import RPi.GPIO as GPIO
GPIO.setmode (GPIO.BOARD)
GPIO.setup (11, GPIO.OUT)
while True:
GPIO.output (11,True)
time.sleep(1)
GPIO.output (11,False)
time.sleep (1)
```

Program for traffic lights:

```python
import RPi.GPIO as GPIO
import time
import signal
import sys
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
def allLightsOff(signal, frame):
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, False)
    GPIO.cleanup()
    sys.exit(0)
signal.signal(signal.SIGINT, allLightsOff)
while True:
  # Red
  GPIO.output(9, True)
  time.sleep(3)
  # Red and amber
  GPIO.output(10, True)
  time.sleep(1)
  # Green
  GPIO.output(9, False)
  GPIO.output(10, False)
  GPIO.output(11, True)
  time.sleep(5)
  # Amber
  GPIO.output(11, False)
  GPIO.output(10, True)
  time.sleep(2)
  # Amber off (red comes on at top of loop)
  GPIO.output(10, False)
```