Assignment -3

Python Programming

Assignment Date	10 September 2022
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Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

```python
import RPi.GPIO as GPIO
import time
import signal
import sys



# Setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)



# Turn off all lights when its end
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)

# Loop for led light
while True:
```

```python
# RED LIGHT
GPIO.output(9, True)
time.sleep(3)

# RED AND YELLOW
GPIO.output(10, True)
time.sleep(1)

# GREEN LIGHT
GPIO.output(9, False)
GPIO.output(10, False)
GPIO.output(11, True)
time.sleep(5)

# YELLOW LIGHT
GPIO.output(11, False)
GPIO.output(10, True)
time.sleep(2)

#YELLOW OFF (red start from first loop)
GPIO.output(10, False)
```