Assignment -3
Python Programming

Assignment Date	4 October 2022
Student Name	Anshio SV
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Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED for Raspberry pi

Solution:

```python
import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:

GPIO.output(8, GPIO.HIGH)

sleep(1)

GPIO.output(8, GPIO.LOW)

sleep(1)
```

Question-2:

Write python code for Traffic lights for Raspberry pi

Solution:

```python
import RPi.GPIO as GPIO

import time


try:

deflightTraffic(led1, led2, led3, delay ):

GPIO.output(led1, 1)

time.sleep(delay)

GPIO.output(led1, 0)

GPIO.output(led2, 1)

time.sleep(delay)

GPIO.output(led2, 0)

GPIO.output(led3, 1)

time.sleep(delay)

GPIO.output(led3, 0)

GPIO.setmode(GPIO.BCM)

 button = 19

GPIO.setup(button, GPIO.IN, pull_up_down=GPIO.PUD_UP)

ledGreen = 16

ledYellow = 12

ledRed = 23
```

```python
GPIO.setup(ledGreen, GPIO.OUT)
GPIO.setup(ledYellow, GPIO.OUT)
GPIO.setup(ledRed, GPIO.OUT)
  while True:
input_state = GPIO.input(button)
    if input_state == False:
print('Button Pressed')
lightTraffic(ledGreen, ledYellow, ledRed, 1)
    else:
GPIO.output(ledGreen, 0)
GPIO.output(ledYellow, 0)
GPIO.output(ledRed, 0)
except KeyboardInterrupt:
  print "You've exited the program"
finally:
GPIO.cleanup()
```