Assignment -3

Python Programming

Assignment Date	06-October 2022
Student Name	J. Jeen Liberta
Student Roll Number	962819106019
Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED and Traffic light for Raspberry pi.only python code is enough.

Solution:

```
import RPi.GPIO as GPIO
import time
try:
  def lightTraffic(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
  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"
```

GPIO.cleanup

finally:

```
🐊 *Untitled*
File Edit Format Run Options Window Help
import RPi.GPIO as GPIO
import time
try:
   def lightTraffic(led1, led2, led3, delay):'
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     GPIO.output(led1, 0)
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except keyboardInterrupt:
   print "You've exited the program"
finally:
                                                                                                             ^ (3 (5) (5) (6 (10 (2)) (10 (2)
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```

```
*Untitled*
File Edit Format Run Options Window Help
import time
    def lightTraffic(led1, led2, led3, delay):'
      GPIO.output(led1, 1)
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    GPIO.setup(ledGreen, GPIO.OUT)
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    while True:
        input state = GPIO.input(button)
        if input state == False:
            print('Button Pressed')
            lightTraffic(ledGreen, ledYellow, ledRed, 1)
            GPIO.output(ledGreen, 0)
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finally:
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^ **(3 (3 (3 (4)**

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