Assignment -3

Python Programming

Assignment Date	06 october 2022
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Maximum Marks	2 Marks

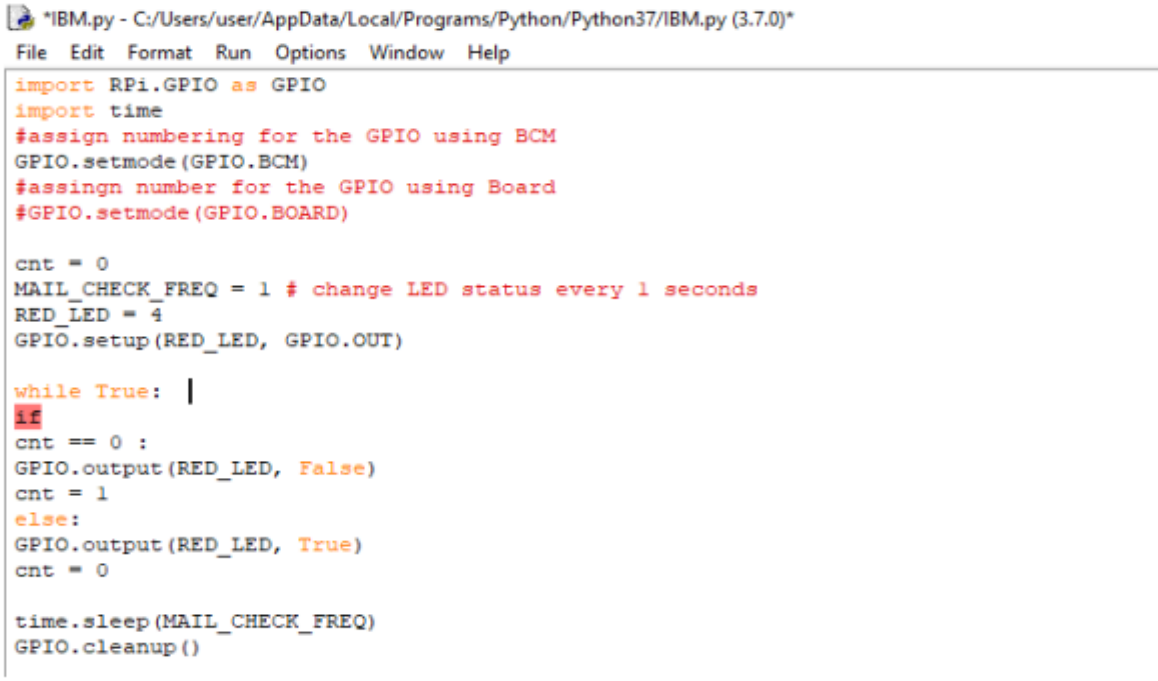
Question-1:

WRITE A PYTHON CODE FOR BLINKING LED FOR RASPBERRY PI.

Programs:

```
import RPi.GPIO as GPIO
import time
 #assign numbering for the GPIO using BCM
GPIO.setmode(GPIO.BCM)
#assingn number for the GPIO using Board
 #GPIO.setmode(GPIO.BOARD)
 cnt = 0
MAIL_CHECK_FREQ = 1 # change LED status every 1 seconds
RED_LED = 4
GPIO.setup(RED_LED, GPIO.OUT)
while True:
 ifcnt == 0 :
GPIO.output(RED_LED, False)
cnt = 1
else:
 GPIO.output(RED_LED, True)
 cnt = 0
 time.sleep(MAIL_CHECK_FREQ)
 GPIO.cleanup()
```

OUTPUT:



Question-2:

WRITE A PYTHON CODE FOR TRAFFIC LIGHT RASPBERRY PI.

PROGRAM:

```
from gpiozero import Button, TrafficLights, Buzzer
from time import sleep
 buzzer = Buzzer(15)
 button = Button(21)
 lights = TrafficLights(25, 8, 7)
 while True:
 button.wait_for_press()
 buzzer.on()
 light.green.on()
sleep(1)
 lights.amber.on()
 sleep(1)
 lights.red.on()
```

sleep(1)

lights.off()

buzzer.off()

Output:

IBMM.py - C:/Users/user/AppData/Local/Programs/Python/Python37/IBMM.py (3.7.0)

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```
from gpiozero import Button, TrafficLights, Buzzer
from time import sleep

buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)

while True:
            button.wait_for_press()
            buzzer.on()
            light.green.on()
            sleep(1)
            lights.amber.on()
            sleep(1)
            lights.red.on()
            sleep(1)
            lights.off()
            buzzer.off()
```