ASSIGNMENT - 3

Assignment Date	08 October 2022
Student Name	V.Nandhini
Student Roll Number	821219104012
Maximum Marks	2 Marks

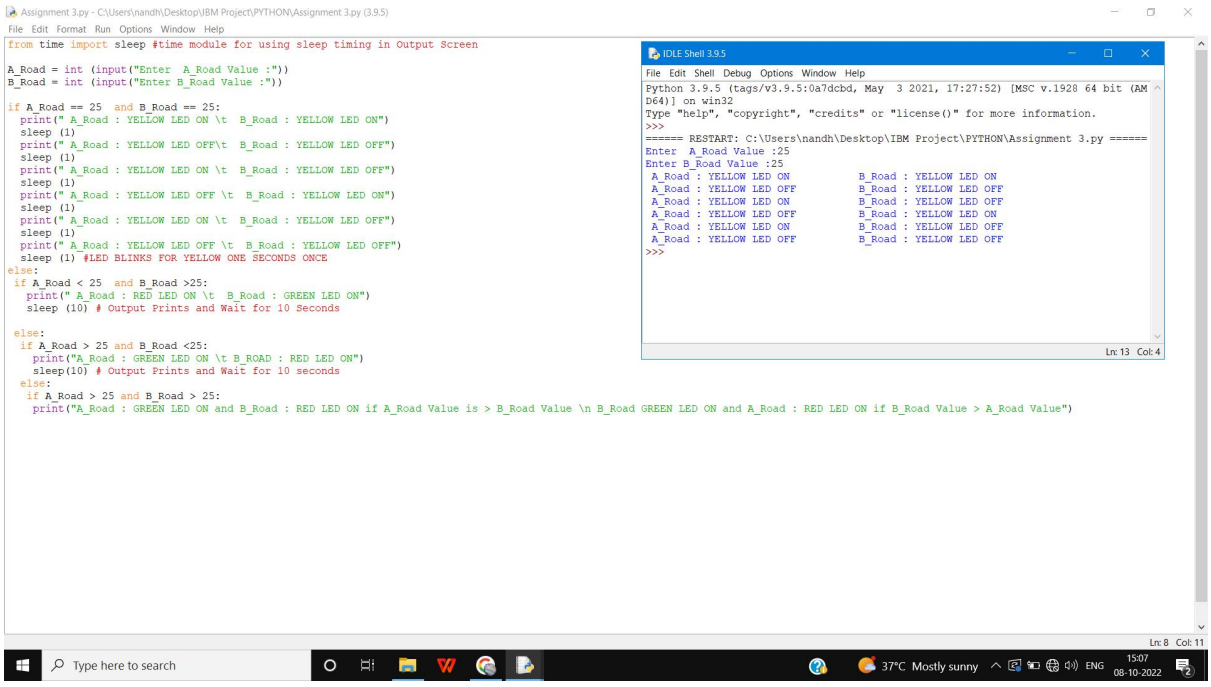
Question :

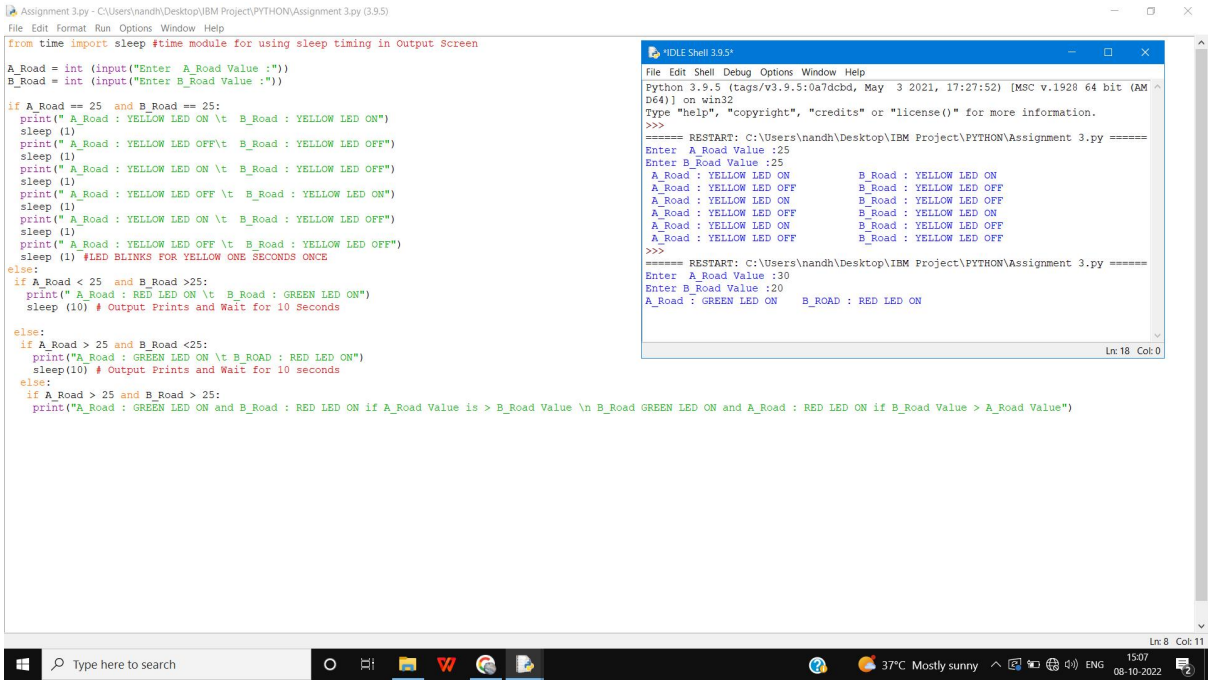
Write Python Code for Blinking LED and Traffic Lights for Raspberry Pi.

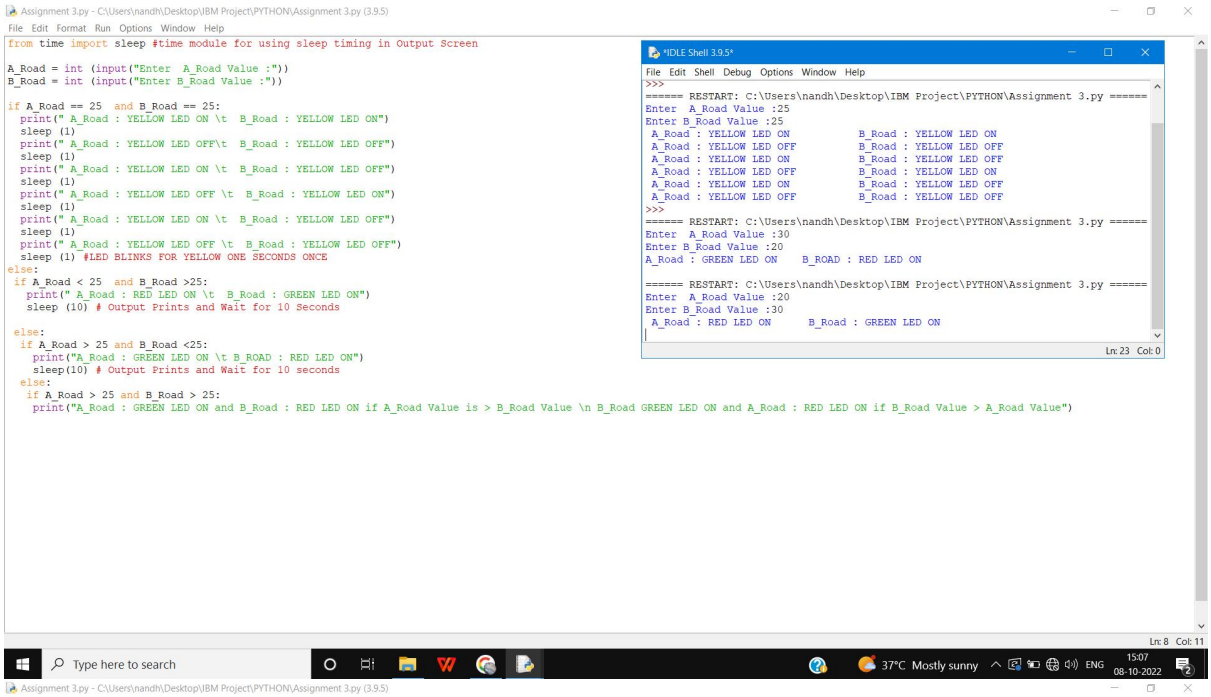
Program:

```
from time import sleep #time module for using sleep timing in Output Screen
A_Road = int (input("Enter  A_Road Value :"))
B_Road = int (input("Enter B_Road Value :"))

if A_Road == 25  and B_Road == 25:
  print(" A_Road : YELLOW LED ON \t  B_Road : YELLOW LED ON")
  sleep (1)
  print(" A_Road : YELLOW LED OFF\t  B_Road : YELLOW LED OFF")
  sleep (1)
  print(" A_Road : YELLOW LED ON \t  B_Road : YELLOW LED OFF")
  sleep (1)
  print(" A_Road : YELLOW LED OFF \t  B_Road : YELLOW LED ON")
  sleep (1)
  print(" A_Road : YELLOW LED ON \t  B_Road : YELLOW LED OFF")
  sleep (1)
  print(" A_Road : YELLOW LED OFF \t  B_Road : YELLOW LED OFF")
  sleep (1) #LED BLINKS FOR YELLOW ONE SECONDS ONCE
else:
 if A_Road < 25  and B_Road >25:
```

```
  print(" A_Road : RED LED ON \t  B_Road : GREEN LED ON")
  sleep (10) # Output Prints and Wait for 10 Seconds

else:
 if A_Road > 25 and B_Road <25:
   print("A_Road : GREEN LED ON \t B_ROAD : RED LED ON")
   sleep(10) # Output Prints and Wait for 10 seconds
 else:
  if A_Road > 25 and B_Road > 25:
   print("A_Road : GREEN LED ON and B_Road : RED LED ON if A_Road Value is > B_Road Value \n
B_Road GREEN LED ON and A_Road : RED LED ON if B_Road Value > A_Road Value")
```




Assignment 3.py - C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py (3.9.5)
File Edit Format Run Options Window Help
from time import sleep #time module for using sleep timing in Output Screen
A_Road = int (input("Enter A_Road Value :"))
B_Road = int (input("Enter B_Road Value :"))
if A_Road == 25 and B_Road == 25:
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED ON")
sleep (1)
print(" A_Road : YELLOW LED OFF\t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED OFF \t B_Road : YELLOW LED ON")
sleep (1)
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED OFF \t B_Road : YELLOW LED OFF")
sleep (1) #LED BLINKS FOR YELLOW ONE SECONDS ONCE
else:
if A_Road < 25 and B_Road >25:
print(" A_Road : RED LED ON \t B_Road : GREEN LED ON")
sleep (10) # Output Prints and Wait for 10 Seconds
else:
if A_Road > 25 and B_Road <25:
print("A_Road : GREEN LED ON \t B_ROAD : RED LED ON")
sleep(10) # Output Prints and Wait for 10 seconds
else:
if A_Road > 25 and B_Road > 25:
print("A_Road : GREEN LED ON and B_Road : RED LED ON if A_Road Value is > B_Road Value \n B_Road GREEN LED ON and A_Road : RED LED ON if B_Road Value > A_Road Value")
IDLE Shell 3.9.5
File Edit Shell Debug Options Window Help
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May 3 2021, 17:27:52) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :25
Enter B_Road Value :25
A_Road : YELLOW LED ON B_Road : YELLOW LED ON
A_Road : YELLOW LED OFF B_Road : YELLOW LED OFF
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED ON
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED OFF
>>>
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :30
Enter B_Road Value :20
A_Road : GREEN LED ON B_ROAD : RED LED ON
Ln: 18 Col: 0
Ln: 8 Col: 11
Type here to search
37°C Mostly sunny
ENG
15:07
08-10-2022


Assignment 3.py - C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py (3.9.5)
File Edit Format Run Options Window Help
from time import sleep #time module for using sleep timing in Output Screen
A_Road = int (input("Enter A_Road Value :"))
B_Road = int (input("Enter B_Road Value :"))
if A_Road == 25 and B_Road == 25:
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED ON")
sleep (1)
print(" A_Road : YELLOW LED OFF\t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED OFF")
sleep (1)
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sleep (1)
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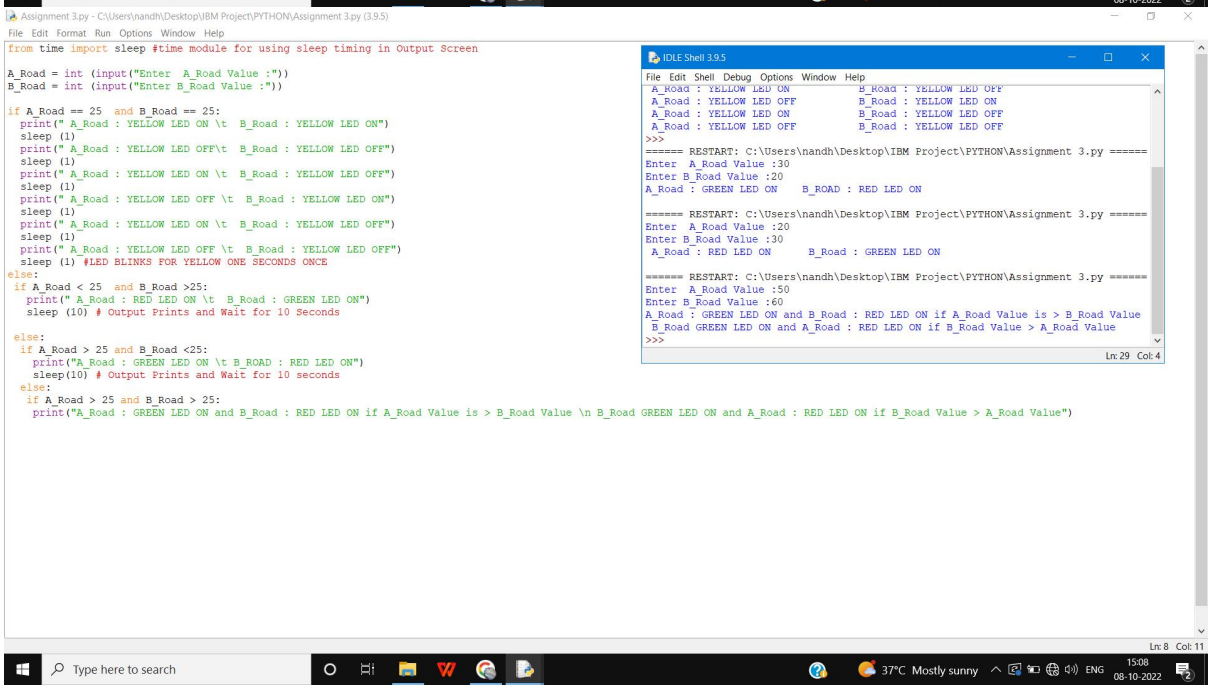
sleep (1)
print(" A_Road : YELLOW LED OFF \t B_Road : YELLOW LED OFF")
sleep (1) #LED BLINKS FOR YELLOW ONE SECONDS ONCE
else:
if A_Road < 25 and B_Road >25:
print(" A_Road : RED LED ON \t B_Road : GREEN LED ON")
sleep (10) # Output Prints and Wait for 10 Seconds
else:
if A_Road > 25 and B_Road <25:
print("A_Road : GREEN LED ON \t B_ROAD : RED LED ON")
sleep(10) # Output Prints and Wait for 10 seconds
else:
if A_Road > 25 and B_Road > 25:
print("A_Road : GREEN LED ON and B_Road : RED LED ON if A_Road Value is > B_Road Value \n B_Road GREEN LED ON and A_Road : RED LED ON if B_Road Value > A_Road Value")
Ln: 8 Col: 11
IDLE Shell 3.9.5
File Edit Shell Debug Options Window Help
>>>
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :25
Enter B_Road Value :25
A_Road : YELLOW LED ON B_Road : YELLOW LED ON
A_Road : YELLOW LED OFF B_Road : YELLOW LED OFF
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED ON
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED OFF
>>>
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :30
Enter B_Road Value :20
A_Road : GREEN LED ON B_ROAD : RED LED ON
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :20
Enter B_Road Value :30
A_Road : RED LED ON B_Road : GREEN LED ON
Ln: 23 Col: 0
Type here to search
37°C Mostly sunny
ENG
15:07
08-10-2022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File Edit Format Run Options Window Help
from time import sleep #time module for using sleep timing in Output Screen
A_Road = int (input("Enter A_Road Value :"))
B_Road = int (input("Enter B_Road Value :"))
if A_Road == 25 and B_Road == 25:
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED ON")
sleep (1)
print(" A_Road : YELLOW LED OFF\t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED OFF \t B_Road : YELLOW LED ON")
sleep (1)
print(" A_Road : YELLOW LED ON \t B_Road : YELLOW LED OFF")
sleep (1)
print(" A_Road : YELLOW LED OFF \t B_Road : YELLOW LED OFF")
sleep (1) #LED BLINKS FOR YELLOW ONE SECONDS ONCE
else:
if A_Road < 25 and B_Road >25:
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sleep (10) # Output Prints and Wait for 10 Seconds
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if A_Road > 25 and B_Road <25:
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sleep(10) # Output Prints and Wait for 10 seconds
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Ln: 8 Col: 11
IDLE Shell 3.9.5
File Edit Shell Debug Options Window Help
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED ON
A_Road : YELLOW LED ON B_Road : YELLOW LED OFF
A_Road : YELLOW LED OFF B_Road : YELLOW LED OFF
>>>
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :30
Enter B_Road Value :20
A_Road : GREEN LED ON B_ROAD : RED LED ON
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :20
Enter B_Road Value :30
A_Road : RED LED ON B_Road : GREEN LED ON
====== RESTART: C:\Users\nandh\Desktop\IBM Project\PYTHON\Assignment 3.py ======
Enter A_Road Value :50
Enter B_Road Value :60
A_Road : GREEN LED ON and B_Road : RED LED ON if A_Road Value is > B_Road Value
B_Road GREEN LED ON and A_Road : RED LED ON if B_Road Value > A_Road Value
>>>
Ln: 29 Col: 4
Type here to search
37°C Mostly sunny
ENG
15:08
08-10-2022