ASSIGNMENT-2

Name: NITHISH T

Topic: Assignment on temperature and humidity sensing and alarm automation using python

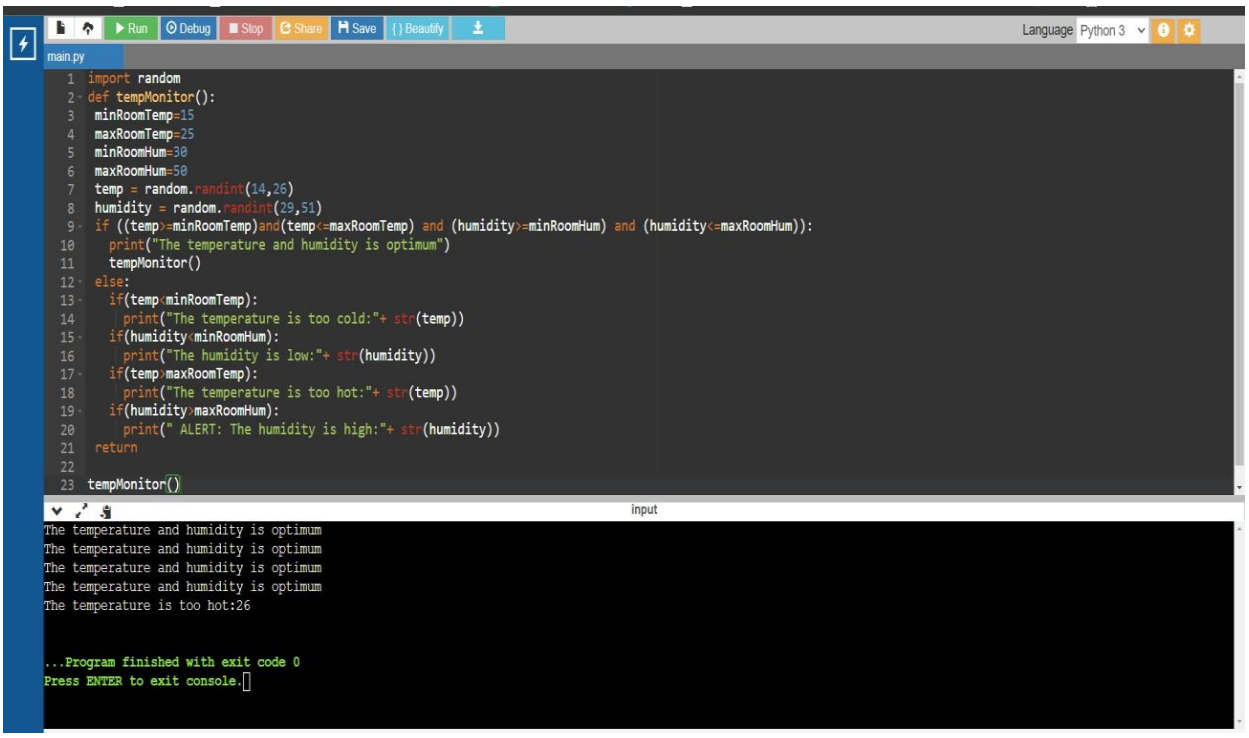
Code:

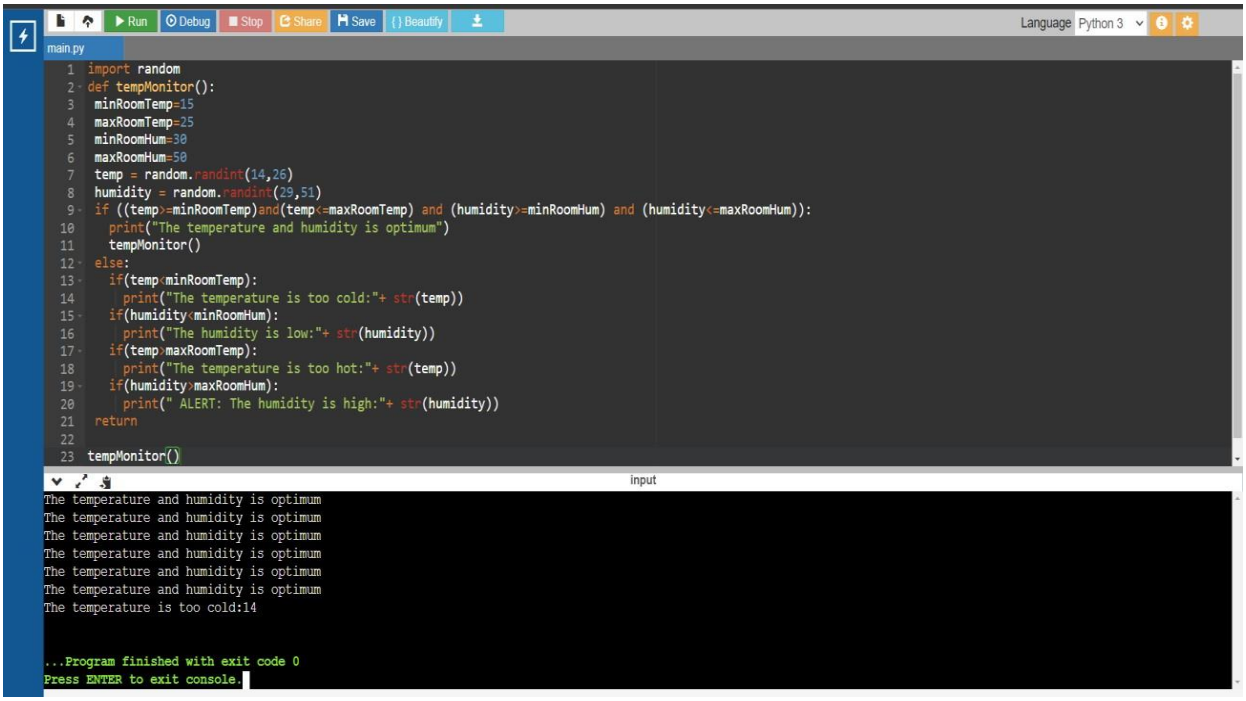
```
import random
def tempMonitor():
 minRoomTemp=15
 maxRoomTemp=25
 minRoomHum=30
 maxRoomHum=50
 temp = random.randint(14,26)
 humidity = random.randint(29,51)
if ((temp>=minRoomTemp)and(temp<=maxRoomTemp) and
(humidity>=minRoomHum) and (humidity<=maxRoomHum)):
   print("The temperature and humidity is optimum")
   tempMonitor()
 else:
   if(temp<minRoomTemp):
     print("The temperature is too cold:"+ str(temp))
   if(humidity<minRoomHum):
```

```
      print("The humidity is low:"+ str(humidity))
   if(temp>maxRoomTemp):
      print("The temperature is too hot:"+ str(temp))
   if(humidity>maxRoomHum):
      print(" ALERT: The humidity is high:"+
str(humidity))
 return


tempMonitor()
```

Output




Run
Debug
Stop
Share
Save
{ } Beautify
Language
Python 3
main.py
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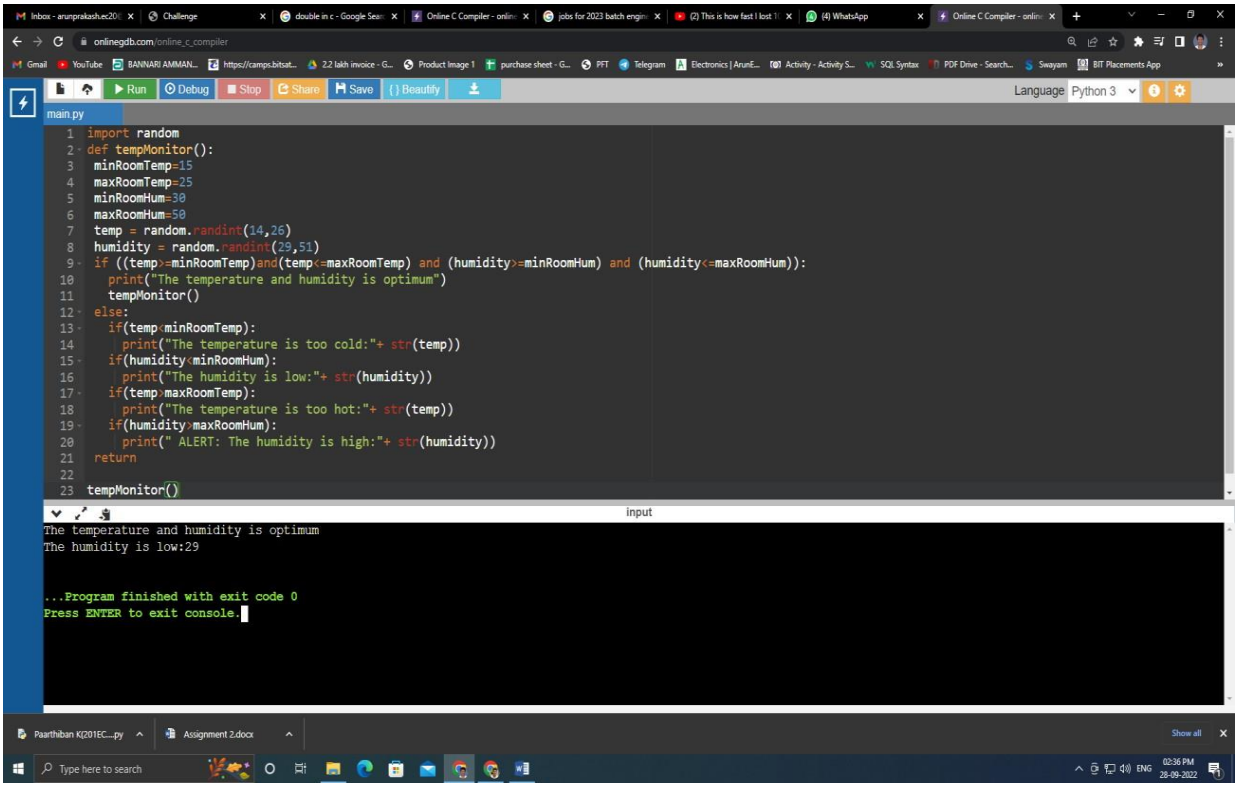
if(temp>maxRoomTemp):
print("The temperature is too hot:"+ str(temp))
if(humidity>maxRoomHum):
print(" ALERT: The humidity is high:"+ str(humidity))
return
tempMonitor()
input
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature is too cold:14
...Program finished with exit code 0
Press ENTER to exit console.


onlinegdb.com/online_c_compiler
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print("The temperature is too hot:"+ str(temp))
if(humidity>maxRoomHum):
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return
tempMonitor()
input
The temperature and humidity is optimum
The humidity is low:29
...Program finished with exit code 0
Press ENTER to exit console.
Paarthiban K[201EC....py
Assignment 2.docx
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ENG
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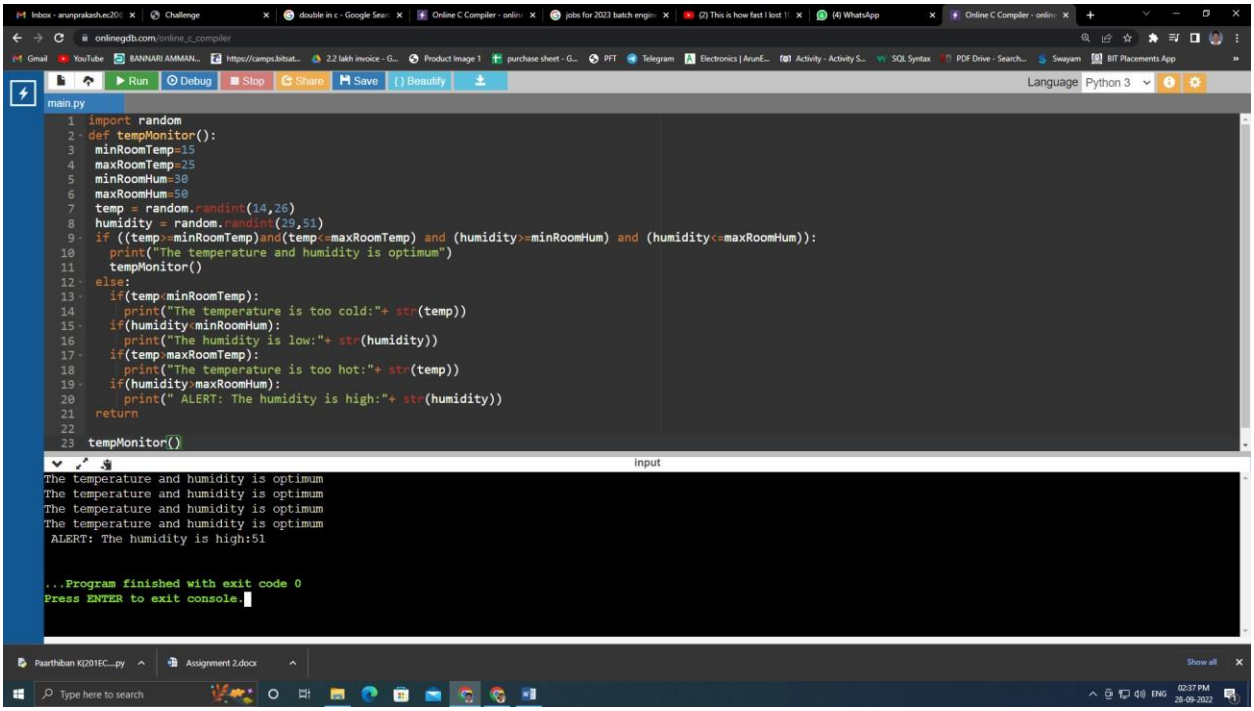
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print(" ALERT: The humidity is high:"+ str(humidity))
return
tempMonitor()
input
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
The temperature and humidity is optimum
ALERT: The humidity is high:51
...Program finished with exit code 0
Press ENTER to exit console.