IBM ASSIGNMENT-2

PYTHON CODE:

```python
import random
import time
while(1!=0):
 temperature = random.random() humidity
 = random.random()
 #round(temperature,2)    #round(humidity,2)
 ("print Temperature: ","%.5f" % temperature)
 print("Humidity:   ","%.5f"   %   humidity)
 time.sleep(2)   if   (temperature   >   0.7):
 print("high temperature")
 if ( humidity >0.7):
    print("high humidity")
    import time
    from w1thermsensor import
    W1ThermSensor
    sensor = W1ThermSensor()

    while True:
       temperature =
    sensor.get_temperature()
       print("The temperature is %s
    celsius" % temperature)
       time.sleep(1)
```

print("")

EXECUTION RESULT

Program

```
import time

from w1thermsensor import W1ThermSensor

sensor = W1ThermSensor()



while True:

    temperature = sensor.get_temperature()

    print("The temperature is %s celsius" % temperature)

    time.sleep(1)
```



```
assignment2.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python310/assignment2.py (3.10.1)
File  Edit  Format  Run  Options  Window  Help
import random
import time
while(1!=0):
    temperature = random.random()
    humidity = random.random()
#round(temperature,2)#round(humidity,2)
print("Temperature: ","%.5f" % temperature)
print("Humidity: ","%.5f" % humidity)
time.sleep(2)
if (temperature > 0.7):
    print("high temperature")
if ( humidity >0.7):
    print("high humidity")
print("")
```

Output

```
Temperature:  0.81853
Humidity:  0.97255
high temperature
high humidity

Temperature:  0.15472
Humidity:  0.05986

Temperature:  0.62464
Humidity:  0.32342

Temperature:  0.83487
Humidity:  0.76008
high temperature
high humidity

Temperature:  0.14701
Humidity:  0.48039

Temperature:  0.79227
Humidity:  0.24788
high temperature

Temperature:  0.87672
Humidity:  0.33046
high temperature

Temperature:  0.67236
Humidity:  0.16511

Temperature:  0.14797
Humidity:  0.59022

Temperature:  0.51479
Humidity:  0.54463

Temperature:  0.25142
Humidity:  0.12738

Temperature:  0.17346
Humidity:  0.24678

Temperature:  0.37653
Humidity:  0.64490
```