

ASSIGNMENT 2

PYTHON CODE

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Build a python code, Assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

```
import random
from time import *
gate=True
while(gate):
    t =
    random.randint(0,50) h
    =
    random.randint(10,50)
    if t>45 and h<40:
        print("Temperature =",t,"Humidity
        =",h) print("ALARM ON")
        gate=False
    else:
        print("Temperature
        =",t,"Humidity",h) sleep(1);
    """
```

OUTPU

T:

Temperature = 27 Humidity 38

Temperature = 36 Humidity 39

Temperature = 23 Humidity 40

Temperature = 24 Humidity 25

Temperature = 10 Humidity 40

Temperature = 17 Humidity 30

Temperature = 17 Humidity 35

= 16 ALARM ON

|| || ||

The image displays two side-by-side windows of the IDLE Shell 3.10.7 environment. Both windows show the same Python script being executed.

Left Window:

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)]  
on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>> import random  
... from time import *  
... gate=True  
... while(gate):  
...     t = random.randint(0,50)  
...     h = random.randint(10,50)  
...     if t<45 and h<40:  
...         print("Temperature =",t,"Humidity =",h)  
...         print("ALARM ON")  
...         gate=False  
...     else:  
...         print("Temperature =",t,"Humidity",h)  
...         sleep(1)  
...  
... OUTPUT:  
... Temperature = 27 Humidity 38  
... Temperature = 36 Humidity 39  
... Temperature = 23 Humidity 40  
... Temperature = 24 Humidity 25  
... Temperature = 10 Humidity 40  
... Temperature = 17 Humidity 30  
... Temperature = 17 Humidity 35  
... Temperature = 48 Humidity = 16  
... ALARM ON  
...  
...</pre>

Right Window:



```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)]
on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
... = RESTART: C:/Users/SUBASH/AppData/Local/Programs/Python/Python310/python.exe for temp.
... PY
... Temperature = 2 Humidity 41
... Temperature = 6 Humidity 40
... Temperature = 47 Humidity = 21
... ALARM ON
>>>
```


```