

## 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);
"""
```

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

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The image displays two side-by-side screenshots of the IDLE Shell 3.10.7 window, showing the execution of a Python script for a temperature and humidity alarm system.

**Left Window (Initial Run):**

```
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(10,30)
...     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
... """
```

**Right Window (After Restart):**

```
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 code for temp.
PY
Temperature = 2 Humidity 41
Temperature = 6 Humidity 48
Temperature = 47 Humidity = 21
ALARM ON
>>>
```