Question:

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.

Solution:

```python
import sys
import math

print('Celsius      Fahrenheit      Humidity')
dp=0
c=0
ind=""
def frost_point(c,dpc):
    dpk=273.15 + dpc
    tak=273.15+c
    fpk=dpk - tak + 2671.02 / ((2954.61 / tak)+ 2.193665 * math.log(tak)-13.3448)
    return fpk - 273.15

def dew_point(c,rh):
    A= 17.27
    B= 273.7

    alpha= ((A*c)/(B+c)) + math.log(rh/100.0)
    dp= (B*alpha)/(A-alpha)

for c in range(30,71,1):
    f=int((c*1.8) + 32)
    hum= 100*((math.e**((17.625 * dp)/(243.04+dp))) / (math.e**((17.625 * f)/(243.04+f))))
    humidity=100*hum
    if f >= 100:
        ind='!!! Over heated !!!'
        print('Warning : ',ind)
        print('''
        ''')
    else:
        print('')
    print('''
    ''')
    print(c,'            ',f,'          %.2f' %humidity)
```

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```

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```
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\HP\P1.py ==========================
Celsius        Fahrenheit       Humidity


30              86              99.86


31              87              96.00


32              89              88.78


33              91              82.18


34              93              76.14


35              95              70.61


36              96              68.02


37              98              63.16
Warning :  !!! Over heated !!!
```