

# ASSIGNMENT 2

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.

## CODE:

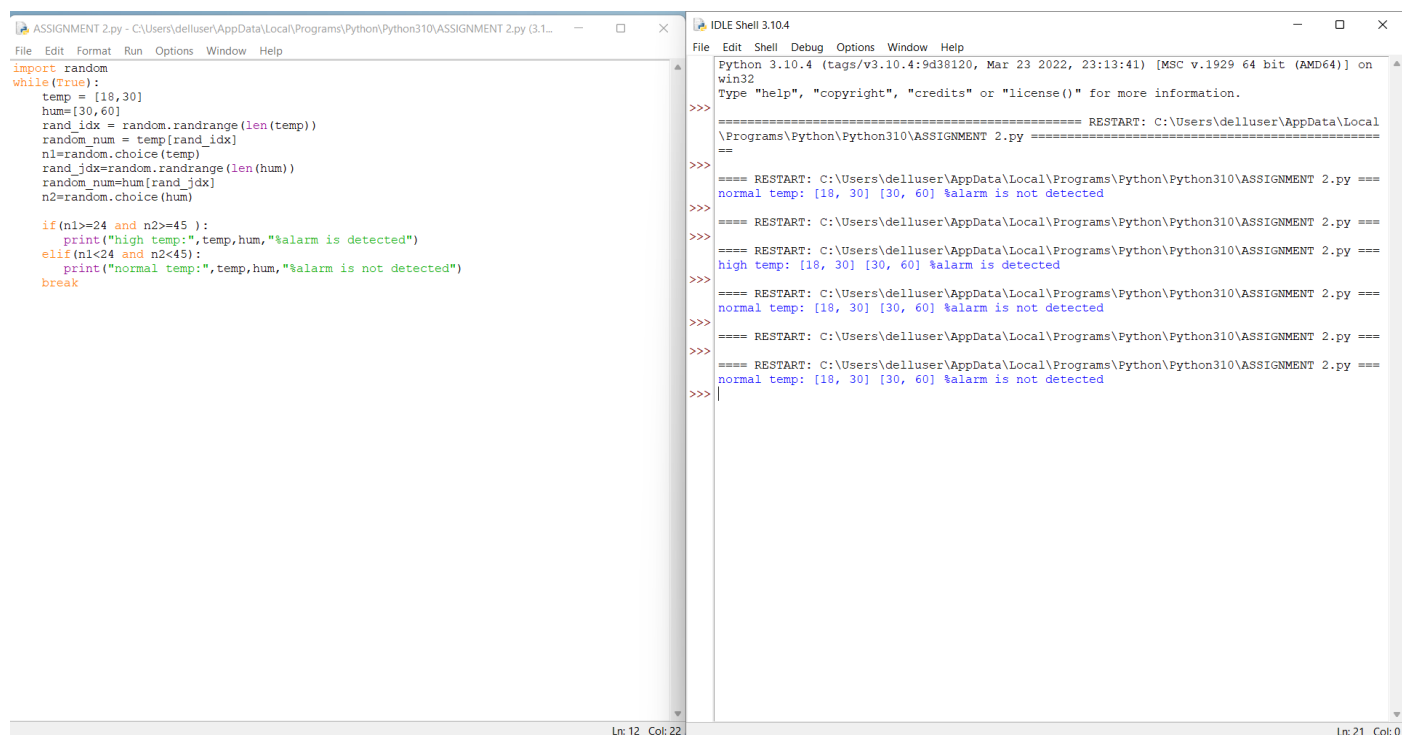
```
import random

while(True):

    temp = [18,30]
    hum=[30,60]
    rand_idx = random.randrange(len(temp))
    random_num = temp[rand_idx]
    n1=random.choice(temp)
    rand_jdx=random.randrange(len(hum))
    random_num=hum[rand_jdx]
    n2=random.choice(hum)

    if(n1>=24 and n2>=45 ):
        print("high temp:",temp,hum,"%alarm is detected")
    elif(n1<24 and n2<45):
        print("normal temp:",temp,hum,"%alarm is not detected")
    break
```

## OUTPUT:



The image shows a screenshot of a Python script and its output. The script, named 'ASSIGNMENT 2.py', is located in the file explorer on the left. It contains a while loop that generates random numbers and checks if they are greater than or equal to 24 and less than or equal to 45. If the condition is met, it prints 'high temp: [temp, hum, %alarm is detected]'. If the condition is not met, it prints 'normal temp: [temp, hum, %alarm is not detected]'. The output, shown in the right pane, displays the results of the script's execution, including the file path and the generated random numbers.

```
import random
while (True):
    temp = [18,30]
    hum=[30,60]
    rand_idx = random.randrange(len(temp))
    random_num = temp[rand_idx]
    n1=random.choice(temp)
    rand_idx=random.randrange(len(hum))
    random_num=hum[rand_idx]
    n2=random.choice(hum)

    if (n1>=24 and n2<=45 ):
        print("high temp:",temp,hum,"%alarm is detected")
    elif (n1<24 and n2<45):
        print("normal temp:",temp,hum,"%alarm is not detected")
    break
```

```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on
win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
normal temp: [18, 30] [30, 60] %alarm is not detected
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
high temp: [18, 30] [30, 60] %alarm is detected
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
normal temp: [18, 30] [30, 60] %alarm is not detected
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
>>>
===== RESTART: C:\Users\delluser\AppData\Local\Programs\Python\Python310\ASSIGNMENT 2.py =====
normal temp: [18, 30] [30, 60] %alarm is not detected
>>>
```

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