

Assignment – 2

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Maximum marks	2

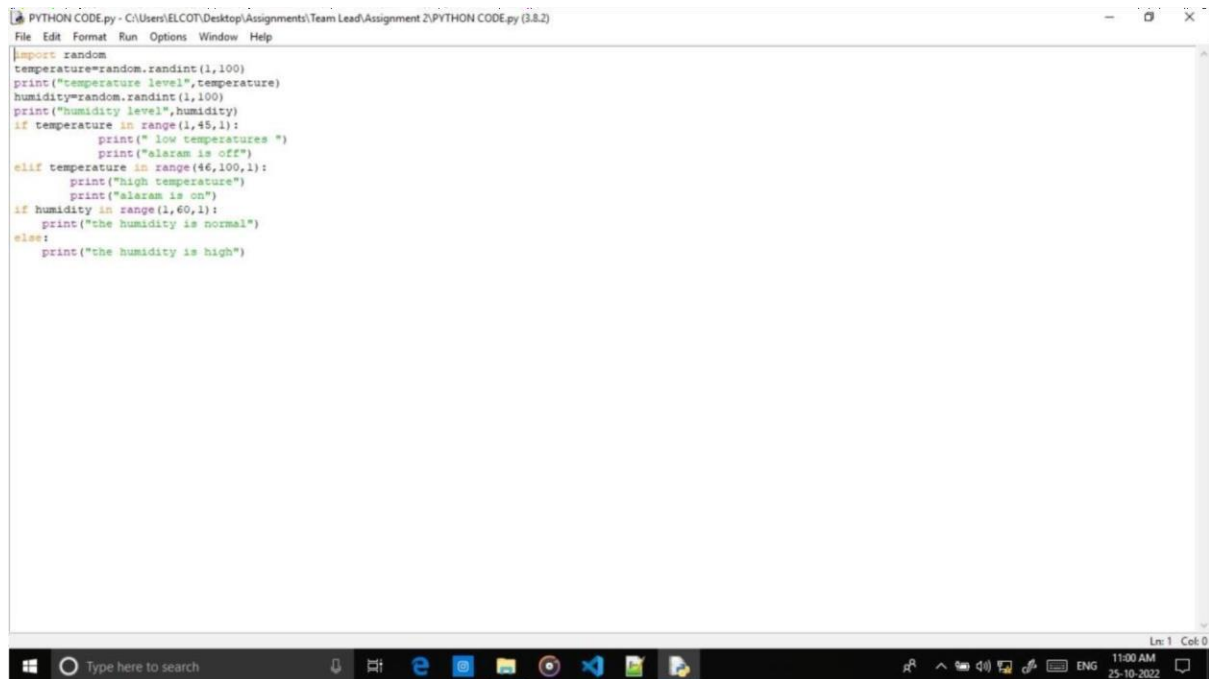
Question 1:

Build a python code, Assume u 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:

```
import random
temperature=random.randint(1,100)
print("temperature level",temperature)
humidity=random.randint(1,100)
print("humidity level",humidity)
if temperature in range(1,45,1):
    print(" low temperatures ")
    print("alaram is off")
elif temperature in range(46,100,1):
    print("high temperature")
    print("alaram is on") if
humidity in range(1,60,1):
    print("the humidity is normal")
else:
```

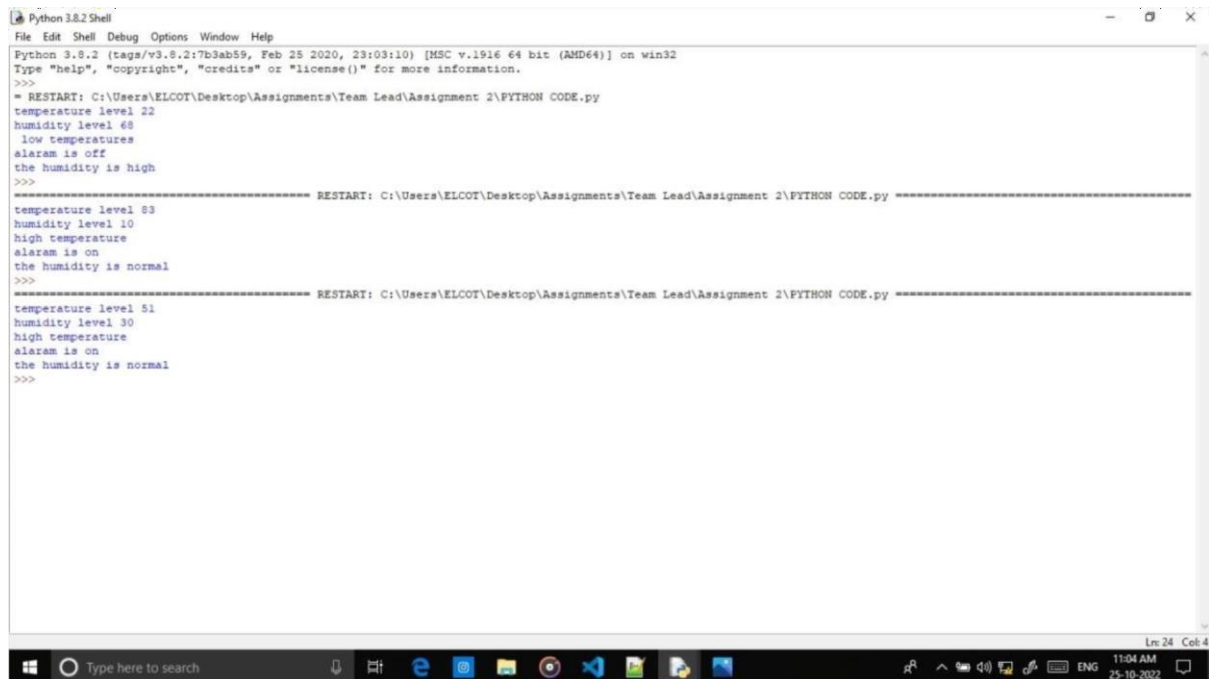
```
print("the humidity is high")
```



The screenshot shows a Python IDE window titled 'PYTHON CODE.py - C:\Users\ELCOT\Desktop\Assignments\Team Lead\Assignment 2\PYTHON CODE.py (3.8.2)'. The code defines random temperature and humidity values and uses conditional logic to print status messages based on these values.

```
import random
temperature=random.randint(1,100)
print("temperature level",temperature)
humidity=random.randint(1,100)
print("humidity level",humidity)
if temperature in range(1,45,1):
    print(" low temperatures ")
    print("alarm is off")
elif temperature in range(46,100,1):
    print("high temperature")
    print("alarm is on")
if humidity in range(1,60,1):
    print("the humidity is normal")
else:
    print("the humidity is high")
```

OUTPUT:



The screenshot shows a Python 3.8.2 Shell window titled 'Python 3.8.2 Shell'. It displays the output of the script from the previous image, showing three separate runs of the code with different random values for temperature and humidity.

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\ELCOT\Desktop\Assignments\Team Lead\Assignment 2\PYTHON CODE.py =====
temperature level 22
humidity level 68
 low temperatures 
alarm is off
the humidity is high
>>>
===== RESTART: C:\Users\ELCOT\Desktop\Assignments\Team Lead\Assignment 2\PYTHON CODE.py =====
temperature level 83
humidity level 10
high temperature
alarm is on
the humidity is normal
>>>
===== RESTART: C:\Users\ELCOT\Desktop\Assignments\Team Lead\Assignment 2\PYTHON CODE.py =====
temperature level 51
humidity level 30
high temperature
alarm is on
the humidity is normal
>>>
```