

Assignment -2

Python Programming

Assignment Date	27 September 2022
Student Name	Mr. Abinеш V
Student Roll Number	2019503001
Maximum Marks	2 Marks

Question:

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

Solution:

Source code:

```
import random
from time import sleep
def generate_values():
    temperature = random.randint(10, 50)
    humidity = random.randint(10, temperature)
    return humidity, temperature

humidity = temperature = 0
i=0
while i<=10:
    humidity, temperature = generate_values()
    print('Humidity:', humidity, 'Temperature:', temperature)
    if temperature>=40:
        print('Alarm Activated : High Temperature Detected\n-----')
    i=i+1
    sleep(0.50)
```

Output:

```
Humidity: 10 Temperature: 38
Humidity: 10 Temperature: 45
Alarm Activated : High Temperature Detected
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Humidity: 14 Temperature: 25
Humidity: 13 Temperature: 18
Humidity: 42 Temperature: 49
Alarm Activated : High Temperature Detected
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Humidity: 26 Temperature: 30
Humidity: 13 Temperature: 23
Humidity: 30 Temperature: 39
Humidity: 23 Temperature: 40
Alarm Activated : High Temperature Detected
-----
Humidity: 10 Temperature: 23
Humidity: 10 Temperature: 43
Alarm Activated : High Temperature Detected
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```