

Assignment -2

IoT-Based Industry - Real-Time River Water Quality
Monitoring and Control System

Python Programming

Assignment Date	22 September,2022
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Maximum Marks	2 Marks

Problem statement:

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:

Python code:

```
import random

import time

while (1):

    temp= random.randint(0, 100)

    humi= random.randint(0, 100)

    thresht=40

    threshh=35

    if temp>thresht :

        print("ALERT!!! Detected temperature is: "+str(temp)+"°C")

    if humi> threshh :

        print("ALERT!!! Detected Humidity is: "+str(humi))

    time.sleep(1)
```

Output:

```
temp tst.py - /Users/abdufzail/Downloads/temp tst.py (3.10.5)
import random
import time
while (1):
    temp= random.randint(0, 100)
    humi= random.randint(0, 100)

    thresht=40
    threshh=35

    if temp>thresht :
        print("ALERT!!! Detected temperature is: "+str(temp)+"°C")

    if humi> threshh :
        print("ALERT!!! Detected Humidity is: "+str(humi))

    time.sleep(1)
|
```

Ln: 19 Col: 0

```
*IDLE Shell 3.10.5*
Python 3.10.5 (v3.10.5:f377153967, Jun 6 2022, 12:36:10) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.

===== RESTART: /Users/abdufzail/Downloads/temp tst.py =====
ALERT!!! Detected temperature is: 66°C
>>>
===== RESTART: /Users/abdufzail/Downloads/temp tst.py =====
ALERT!!! Detected Humidity is: 40
ALERT!!! Detected Humidity is: 54
ALERT!!! Detected Humidity is: 90
ALERT!!! Detected temperature is: 69°C
ALERT!!! Detected Humidity is: 67
ALERT!!! Detected temperature is: 100°C
ALERT!!! Detected Humidity is: 37
ALERT!!! Detected Humidity is: 94
ALERT!!! Detected Humidity is: 60
ALERT!!! Detected temperature is: 73°C
ALERT!!! Detected Humidity is: 100
ALERT!!! Detected Humidity is: 66
ALERT!!! Detected Humidity is: 88
ALERT!!! Detected temperature is: 86°C
ALERT!!! Detected temperature is: 63°C
ALERT!!! Detected Humidity is: 86
ALERT!!! Detected temperature is: 58°C
ALERT!!! Detected Humidity is: 46
|
```

Ln: 10 Col: 0