

Assignment – 2
Python Programming

Assignment Date	7 October 2022
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Maximum Marks	2 Marks

Question:

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 import time`

`while(True):`

`temp=random.randint(16,40) humid=random.randint(30,99)`

`if(temp>30):`

`print("Alarm is ON due to high temperature of",temp,"degree celsius")`

`time.sleep(1) elif(temp<30): print("Alarm is OFF due to Normal`

`temperature of",temp,"degree celsius") time.sleep(1) if (humid<50):`

`print("Alarm is OFF due to Normal humidity of",humid,"%") time.sleep(1)`

`elif(humid>50): print("Alarm is ON due to High humidity of",humid,"%")`

`time.sleep(1)`

OUTPUT:

```
*IDLE Shell 3.9.8*
File Edit Shell Debug Options Window Help
Python 3.9.8 (tags/v3.9.8:bb3fddf, Nov 5 2021, 20:48:33) [MS
Type "help", "copyright", "credits" or "license()" for more
>>>
===== RESTART: E:/Education/IBM/Assignment 2/Alarm for h
Alarm is ON due to high temperature of 37 degree celsius
Alarm is ON due to High humidity of 73 %
Alarm is OFF due to Normal temperature of 23 degree celsius
Alarm is ON due to High humidity of 68 %
Alarm is OFF due to Normal temperature of 24 degree celsius
Alarm is OFF due to Normal humidity of 35 %
Alarm is ON due to high temperature of 33 degree celsius
Alarm is ON due to High humidity of 95 %
Alarm is ON due to high temperature of 40 degree celsius
Alarm is OFF due to Normal humidity of 33 %
Alarm is OFF due to Normal temperature of 21 degree celsius
Alarm is OFF due to Normal humidity of 39 %
Alarm is OFF due to Normal temperature of 27 degree celsius
Alarm is OFF due to Normal humidity of 31 %
Alarm is OFF due to Normal temperature of 20 degree celsius
Alarm is ON due to High humidity of 56 %
Alarm is ON due to high temperature of 35 degree celsius
Alarm is ON due to High humidity of 78 %
Alarm is OFF due to Normal temperature of 16 degree celsius
Alarm is ON due to High humidity of 86 %
Alarm is ON due to high temperature of 40 degree celsius
Alarm is ON due to High humidity of 76 %
Alarm is ON due to high temperature of 33 degree celsius
Alarm is OFF due to Normal humidity of 36 %
Alarm is OFF due to Normal temperature of 29 degree celsius
Alarm is OFF due to Normal humidity of 46 %
Alarm is OFF due to Normal temperature of 27 degree celsius
|
```