

ASSIGNMENT 2

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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.

PROGRAM:

```
import random

temprature=random.sample(range(30,50),1)

print("Temprature is",temprature)

if(temprature>=[46]):

    print("High Temprature")

    print("Alarm is on")

else:

    print("Temprature is Normal")

humidity=random.sample(range(30,50),1)

print("Humidity is",humidity)

if(humidity>=[50]):

    print("Humidity level is High")

else:

    print("Humidity level is Low")

soil_moisture=random.sample(range(30,60),1)

print("Soil Moisture is",soil_moisture)

if(soil_moisture>=[50]):

    print("Soil Moisture level is Normal")


else:
```

```
print("Soil Moisture level is Low")
```

```
print("Water Pump is on")
```

SCREENSHOTS:

➤ CODE:

 Assignment2.py - D:/Project/IBM Project/Assignment2.py (3.6.7)

File Edit Format Run Options Window Help

```
import random
temperature=random.sample(range(30,50),1)
print("Temprature is",temprature)
if(temperature>=[46]):
    print("High Temprature")
    print("Alarm is on")
else:
    print("Temprature is Normal")
humidity=random.sample(range(30,50),1)
print("Humidity is",humidity)
if(humidity>=[50]):
    print("Humidity level is High")
else:
    print("Humidity level is Low")
soil_moisture=random.sample(range(30,60),1)
print("Soil Moisture is",soil_moisture)
if(soil_moisture>=[50]):
    print("Soil Moisture level is Normal")
else:
    print("Soil Moisture level is Low")
    print("Water Pump is on")
```

OUTPUT:

Python 3.6.7 Shell

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Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: D:/Project/IBM Project/Assignment2.py =====

Temprature is [49]

High Temprature

Alarm is on

Humidity is [32]

Humidity level is Low

Soil Moisture is [50]

Soil Moisture level is Normal

>>>

===== RESTART: D:/Project/IBM Project/Assignment2.py =====

Temprature is [37]

Temprature is Normal

Humidity is [30]

Humidity level is Low

Soil Moisture is [43]

Soil Moisture level is Low

Water Pump is on

>>>

===== RESTART: D:/Project/IBM Project/Assignment2.py =====

Temprature is [37]

Temprature is Normal

Humidity is [37]

Humidity level is Low

Soil Moisture is [31]

Soil Moisture level is Low

Water Pump is on

>>>

===== RESTART: D:/Project/IBM Project/Assignment2.py =====

Temprature is [46]

High Temprature

Alarm is on

Humidity is [34]

Humidity level is Low

Soil Moisture is [34]

Soil Moisture level is Low

Water Pump is on

>>>