

IBM ASSIGNMENT – 2

Python Programming

Team ID	PNT2022TMID50840
Project Name	Gas leakage monitoring and alerting system

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.

CODE:

```
import random

def temperature():
    value=random.randint(25,100)
    return value

t=temperature()
t=int(input("Enter the temperature value: "))

def humidity():
    range=random.randint(40,100)
    return range

h=humidity()
```

```
h=int(input("Enter the humidity value: "))
```

```
#for temperature
```

```
if(t>30):
```

```
    print("High temperature is detected")
```

```
    print("Buzzer on,alarm sound is high")
```

```
elif(t==30):
```

```
    print("Temperature reached maximum")
```

```
else:
```

```
    print("Temperature is good")
```

```
#for humidity
```

```
if(h>65):
```

```
    print("High Humidity is detected")
```

```
    print("Buzzer on,alarm sound is high")
```

```
elif(h==65):
```

```
    print("Humidity reached maximum")
```

```
else:
```

```
    print("Humidity is good")
```

PROGRAM:

```
IBM.py - C:/Users/User/Desktop/IBM.py (3.9.8)
File Edit Format Run Options Window Help

import random
def temperature():
    value=random.randint(25,100)
    return value
t=temperature()
t=int(input("Enter the temperature value: "))

def humidity():
    range=random.randint(40,100)
    return range
h=humidity()
h=int(input("Enter the humidity value: |"))

#for temperature
if(t>30):
    print("High temperature is detected")
    print("Buzzzer on,alarm sound is high")
elif(t==30):
    print("Temperature reached maximum")
else:
    print("Temperature is good")

#for humidity
if(h>65):
    print("High Humidity is detected")
    print("Buzzzer on,alarm sound is high")
elif(h==65):
    print("Humidity reached maximum")
else:
    print("Humidity is good")

Ln: 12 Col: 39
```

OUTPUT:

```
IDLE Shell 3.9.8
File Edit Shell Debug Options Window Help

Python 3.9.8 (tags/v3.9.8:bb3f9dcf, Nov 5 2021, 20:48:33) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/User/Desktop/IBM.py =====
Enter the temperature value: 31
Enter the humidity value: 66
High temperature is detected
Buzzzer on,alarm sound is high
High Humidity is detected
Buzzzer on,alarm sound is high
>>> |

Ln: 11 Col: 4
```

