

Assignment – 2
Python Programming

| | |
|---------------------|----------------|
| Assignment Date | 7 October 2022 |
| Student Name | E. Tamilselvan |
| Student Roll Number | 512719106020 |
| 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:bb3fdcf, Nov 5 2021, 20:48:33) [MS
Type "help", "copyright", "credits" or "license()" for more i
>>>
===== RESTART: E:/Education/IBM/Assignment 2/Alarm for hi
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
|
```