IBM ASSIGNMENT – 2

Name:
DIVYA S Roll
no:
713519CEEC008

ASSIGNMENT QUESTION:

Build a python code, assume you 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.

PYTHON CODE:

```python
import random
from time import sleep

while True:
    temperature=round(random.uniform(10, 50),2)
    humidity=round(random.uniform(10, 100),2)
    print("\nTemperature =", temperature,"degree celsius")print("Humidity = ",humidity,"%") if(temperature>32):
        print("STATE : ALARM ON")
    else:
        print("STATE : ALARM OFF")
    sleep(5)
```

EXECUTION RESULT

Output

```
main.py                                     Run
1  import random
2  from time import sleep
3
4  while True:
5      temperature=round(random.uniform(10, 50),2)
6      humidity=round(random.uniform(10, 100),2)
7      print("\nTemperature =", temperature,"degree celsius")
8      print("Humidity = ",humidity,"%")
9      if(temperature>32):
10         print("STATE : ALARM ON")
11     else:
12         print("STATE : ALARM OFF")
13     sleep(5)
```

```
Shell                                            Clear
3Temperature = 35.36 degree celsius
Humidity =  16.02 %
STATE : ALARM ON
Temperature = 20.38 degree celsius
Humidity =  18.08 %
STATE : ALARM OFF
Temperature = 40.13 degree celsius
Humidity =  23.37 %
STATE : ALARM ON
Temperature = 34.18 degree celsius
Humidity =  27.09 %
STATE : ALARM ON
21Temperature = 20.49 degree celsius
Humidity =  15.44 %
STATE : ALARM OFF
Temperature = 45.9 degree celsius
Humidity =  78.05 %
STATE : ALARM ON
Temperature = 28.68 degree celsius
Humidity =  58.49 %
STATE : ALARM OFF
Temperature = 43.48 degree celsius
```