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| <b>Project Name</b>        | Hazardous Area Monitoring for Industrial Plant<br>powered by IoT |

### ASSIGNMENT-2

#### 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.

#### CODE:

```
import random

from time import sleep

while True:

    sleep(5)

    temperature = random.randrange(0, 200, 3)

    print("\nCurrent Temperature =",temperature,end="°C\n")

    humidity = random.randrange(0, 100, 6)

    print("Current Humidity   =",humidity,end="%\n\n")

    if temperature >=38:

        print("Temperature >> High - Alarm ON")

    if humidity >= 75:

        print("Humidity   >> High - Alarm ON")

    if temperature <=38:

        print("Temperature >> Low  - Alarm OFF")

    if humidity <= 75:

        print("Humidity   >> Low  - Alarm OFF")
```

#### OUTPUT

```
Python 3.10.7 (tags/v3.10.7:6c0b13, Sep 5 2022, 14:08:36) [
  MSVC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
Restart: C:\Users\Dark-Devil\Desktop\test.p
y
Current Temperature : 12°C
Current Humidity : 66%
Temperature : Low - Alarm OFF
Humidity : Low - Alarm OFF
Current Temperature : 123°C
Current Humidity : 72%
Temperature : High - Alarm ON
Humidity : Low - Alarm OFF
Current Temperature : 177°C
Current Humidity : 24%
Temperature : High - Alarm ON
Humidity : Low - Alarm OFF
Current Temperature : 183°C
Current Humidity : 18%
Temperature : High - Alarm ON
Humidity : Low - Alarm OFF

import random
from time import sleep
while True:
    sleep(5)
    temperature = random.randrange(0, 200, 3)
    print("Current Temperature : ", temperature, end="°C\n")
    humidity = random.randrange(0, 100, 6)
    print("Current Humidity : ", humidity, end="%\n\n")
    if temperature >= 38:
        print("Temperature : High - Alarm ON")
    if humidity >= 75:
        print("Humidity : High - Alarm ON")
    if temperature <= 38:
        print("Temperature : Low - Alarm OFF")
    if humidity <= 75:
        print("Humidity : Low - Alarm OFF")
```