

DATE	19 September 2022
STUDENT NAME	B VISHNU PRIYA
PROJECT NAME	IOT Based Smart Crop Protection System for Agriculture
MAXIMUM MARKS	2 Marks

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 .

Solution:

```
import random
```

```
import time
```

```
while (1):
```

```
    temp = random.uniform(0,100)
```

```
    humi = random.uniform(0,100)
```

```
    print("Temperature :",temp)
```

```
    print("Humidity :",humi,"%")
```

```
    time.sleep(1.5)
```

```
    if (temp > 50.0):
```

```
        print("alarm is on")
```

The screenshot shows a Python IDE with a dark theme. On the left, the code is written in a syntax-highlighted font. On the right, the output of the code is displayed in a separate pane. The code is a loop that generates random temperature and humidity values, prints them, and sleeps for 1.5 seconds. It also includes a condition to print 'alarm is on' if the temperature is greater than 50.0. The output shows several iterations of the loop, with the temperature and humidity values printed, and the 'alarm is on' message appearing twice when the temperature exceeded 50.0.

```
1 import random
2 import time
3 while(1):
4
5     temp = random.uniform(0,100)
6     humi = random.uniform(0,100)
7     print("Temperature :",temp)
8     print("Humidity :",humi,"%")
9     time.sleep(1.5)
10
11     if (temp > 50.0):
12         print("alarm is on")
```

```
In [25]: runfile('C:/Users/my pc/.spyder-py3/temp.py', wdir='C:/Users/my pc/.spyder-py3',
current_namespace=True)
Temperature : 36.07568817833495
Humidity : 57.819963756015504 %
Temperature : 53.42489478200475
Humidity : 65.4078842727253 %
alarm is on
Temperature : 42.6443855857892
Humidity : 12.884372564115887 %
Temperature : 59.37744527823505
Humidity : 67.440968057245 %
alarm is on
Temperature : 73.50693172110144
Humidity : 40.35664468687437 %
alarm is on
```