

Assignment – 2
Python Programming

Assignment Date	5 October 2022
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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:

```
##### use ( pip install requests )in cmd #####
```

```
##### if No module named 'requests' #####
```

```
## Dummy prints used for give space between Outputs ##
```

```
import requests
```

```
import json
```

```
import random
```

```
import time
```

```
weatherdata =
```

```
requests.get('https://api.openweathermap.org/data/2.5/weather?q=Chennai&appid=3942dd61b26410206c466575e5addfbf')
```

```
print(weatherdata.text)
```

```
a=weatherdata.text
```

```
print()
```

```
print()
```

```
print(type(a)) # printing Class of weatherdata.text
```

```
print()
```

```
print()
```

```
b=json.loads(a) # Class after import json
```

```
print(type(b))

print()

print()

print("Coordinates of Chennai is :",b["coord"])

print()

c=(b["main"]["temp"]-273.15)

print("Temperature of Chennai is :",c,"Degree celsius")

print()

d=(b["main"]["humidity"])

print("Humidity of Chennai is :",d,"%")

print()

print()

while(True):

    if(c>30):

        print("Alarm is ON due to high temperature of",c,"degree celsius")

        time.sleep(2)

    elif(c<30):

        print("Alarm is OFF due to Normal temperature of",c,"degree celsius")

        time.sleep(2)

    if (d<60):

        print("Alarm is OFF due to Normal humidity of",d,"%")

        time.sleep(2)

    elif(d>60):

        print("Alarm is ON due to High humidity of",d,"%")

        time.sleep(2)
```

[illegible]