

ASSIGNMENT 02

ASSIGNMENT DATE	MAY 01 2023
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TEAM ID :NM2023TMID08027

PROJECT TITLE

IOT BASED WEATHER ADAPTIVE STREET LIGHTING SYSTEM

ASSIGNMENT 02

BUILD PYTHON CODE,GENERATE TEMPERATURE AND HUMIDITY VALUES

(USING RANDOM FUNCTIONS TO GENERATE VALUES) AND

WRITE A CONDITION TO DETECT AN ALARM IN CASE OF HIGH TEMPERATURE

AND HIGH HUMIDITY.

CODE:

```
'''Build a python code, assume u get temp and humidity values
(generated with random function to a variable) and write a
conditon to continuously detect alarm in
case of high temperature'''
#import the necessary package!
import request
import random
from time import *
gate=True
#input the city name
def run_city():
    city = input('input the city name')
    print(city)

# or you can also hard-code the value

#Display the message!
print('Displaying Weater report for: ' + city)
```

```

#fetch the weater details
url = 'https://wttr.in/{}'.format(city)
res = requests.get(url)

#display the result!
print(res.text)

#temprature searching
while(gate):
    temperature = random.randint(0,50)
    humidity = random.randint(10,50)
    if temperature>45 and humidity<50:
        print("Temperature =",temperature,"Humidity =",humidity)
        print("Alert message in Activate")
        gate=False
    else:
        print("Temperature =",temperature,"Humidity",humidity)
        sleep(1);

#enter temprature value
x= int(input("Please enter the Humidity value :"))
y= int(input("Please enter the temprature value :"))
z=print(x,y)
print(z)
if x == 36.5:
    print("Due to Temperature report you are in normal days")
if x < 36:
    print("your Temperature is low compare to normal days")
if x > 36:
    print("your Temperature is high compare to normal days")
if y == 45:
    print("Due to Humidity report you are in normal place")
if y < 45:
    print("your Humidity is low compare to normal days")
if y > 45:
    print("your Humidity is high compare to normal days")

while True:
    run city()

```

OUTPUT:



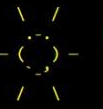

```





Temperature = 15 Humidity 16
Temperature = 6 Humidity 20
Temperature = 13 Humidity 34
Temperature = 29 Humidity 45
Temperature = 7 Humidity 45
Temperature = 42 Humidity 17
Temperature = 46 Humidity = 27
Alert message in Activate
Please enter the Humidity value :49
Please enter the temperature value :47
49 47
None
your Temperature is high compare to normal days
your Humidity is high compare to normal days
input the city namechennai
chennai
Displaying Weater report for: chennai
Weather report: chennai





```


 Partly cloudy
+100 (109) °F
+ 12 mph
 6 mi
 0.0 in

Sun 14 May			
Morning	Noon	Evening	Night
 Sunny +93 (100) °F + 16 24 mph 6 mi 0.0 in 0%	 Sunny +104 (118) °F + 8 mph 6 mi 0.0 in 0%	 Clear +91 (105) °F ~ 13 24 mph 6 mi 0.0 in 0%	 Clear +87 (102) °F ↑ 16 26 mph 6 mi 0.0 in 0%

Sun 14 May			
Morning	Noon	Evening	Night
 Sunny +93 (100) °F + 16 24 mph 6 mi 0.0 in 0%	 Sunny +104 (118) °F + 8 mph 6 mi 0.0 in 0%	 Clear +91 (105) °F ~ 13 24 mph 6 mi 0.0 in 0%	 Clear +87 (102) °F ↑ 16 26 mph 6 mi 0.0 in 0%

Mon 15 May			
Morning	Noon	Evening	Night
 Sunny +95 (102) °F + 13 19 mph 6 mi 0.0 in 0%	 Sunny +105 (122) °F + 7 8 mph 6 mi 0.0 in 0%	 Clear +89 (104) °F ~ 16 27 mph 6 mi 0.0 in 0%	 Clear +87 (104) °F ↑ 18 25 mph 6 mi 0.0 in 0%

Tue 16 May			
Morning	Noon	Evening	Night
 Sunny +93 (104) °F + 6 8 mph 6 mi 0.0 in 0%	 Sunny +100 (120) °F + 6 7 mph 6 mi 0.0 in 0%	 Clear +89 (102) °F ~ 16 25 mph 6 mi 0.0 in 0%	 Clear +87 (102) °F ↑ 14 21 mph 6 mi 0.0 in 0%

Location: corporation of Chennai, Chennai district, Tamil Nadu, India [13.0801721,80.2838331]

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input the city namekolkata

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input the city namekolkata

kolkata

Displaying weater report for: kolkata

Weather report: kolkata

Haze
-- -- -- --
+95/91 °F
↓ 14 mph
6 mi
0.0 in | 0%

Sun 14 May			
Morning	Noon	Evening	Night
 Sunny +95/96 °F ↓ 16/19 mph 6 mi 0.0 in 0%	 Sunny +107/109 °F ↓ 18/20 mph 6 mi 0.0 in 0%	 Clear 89 °F + 15/22 mph 6 mi 0.0 in 0%	 Clear 84 °F ~ 9/14 mph 6 mi 0.0 in 0%

Mon 15 May			
Morning	Noon	Evening	Night
 Sunny +96/104 °F ↑ 18/21 mph 6 mi 0.0 in 0%	 Sunny +107/122 °F ↑ 19/22 mph 6 mi 0.0 in 0%	 Clear +89/102 °F ~ 18/22 mph 6 mi 0.0 in 0%	 Overcast +86/98 °F ↑ 16/22 mph 6 mi 0.0 in 0%

Tue 16 May			
Morning	Noon	Evening	Night

 6 mi 0.0 in 0%	 6 mi 0.0 in 0%	 6 mi 0.0 in 0%	 6 mi 0.0 in 0%
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Tue 16 May			
Morning	Noon	Evening	Night
 Sunny +96/109 °F ↑ 19/22 mph 6 mi 0.0 in 0%	 Sunny +107/127 °F ↑ 18/21 mph 6 mi 0.0 in 0%	 Thundery outbr. +89/102 °F ~ 16/21 mph 5 mi 0.0 in 0%	 Partly cloudy +87/100 °F ~ 13/19 mph 6 mi 0.0 in 0%

Location: Kolkata, Hâora, West Bengal, India [22.5677459,88.3476023]

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input the city namechennai




chennai

Displaying weater report for: chennai

Weather report: chennai

Partly cloudy
- / "" / ""
+100/109 °F
+ 12 mph
3 mi
0.0 in

Sun 14 May			
Morning	Noon	Evening	Night
 Sunny +93/100 °F + 16/24 mph 6 mi	 Sunny +104/118 °F + 8 mph 6 mi	 Clear +91/105 °F ~ 13/24 mph 6 mi	 Clear +87/102 °F ↑ 16/26 mph 6 mi

0.0 in			
Morning		Sun 14 May	
 Sunny +93 100 °F → 16 24 mph 6 mi 0.0 in 0%	 Sunny +104 118 °F → 8 mph 6 mi 0.0 in 0%	 Clear +91 105 °F ↘ 13 24 mph 6 mi 0.0 in 0%	 Clear +87 102 °F ↑ 16 26 mph 6 mi 0.0 in 0%
Morning		Mon 15 May	
 Sunny +95 102 °F → 13 19 mph 6 mi 0.0 in 0%	 Sunny +105 122 °F → 7 8 mph 6 mi 0.0 in 0%	 Clear +89 104 °F ↘ 16 27 mph 6 mi 0.0 in 0%	 Clear +87 104 °F ↑ 18 25 mph 6 mi 0.0 in 0%
Morning		Tue 16 May	
 Sunny +93 104 °F ↗ 6 8 mph 6 mi 0.0 in 0%	 Sunny +100 120 °F → 6 7 mph 6 mi 0.0 in 0%	 Clear +89 102 °F ↘ 16 25 mph 6 mi 0.0 in 0%	 Clear +87 102 °F ↑ 14 21 mph 6 mi 0.0 in 0%
Location: Corporation of Chennai, Chennai district, Tamil Nadu, India [13.0801721,80.2838331]			
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