

KCG COLLEGE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IOT ASSIGNMENT

**TOPIC: IoT BASED SMART CROP PROTECTION
SYSTEM FOR AGRICULTURE**

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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:

```
import
randomimport
time
while(1!=0):
    temperature =
    random.random()humidity =
    random.random()
    #round(temperature,2) #round(humidity,2)
    ("print Temperature: ", "%.5f" %
    temperature)print("Humidity: ", "%.5f" %
    humidity) time.sleep(2)
    if (temperature > 0.7):
        print("high temperature")
    if ( humidity >0.7):
        print("high humidity")
    print("")
```

EXECUTION RESULT

PROGRAM

```
file  edit  format  run  options  window  help
import random
import time
while(1!=0):
    temperature = random.random()
    humidity = random.random()
    #round(temperature,2) #round(humidity,2)
    print("Temperature: ", "%.5f" % temperature)
    print("Humidity: ", "%.5f" % humidity)
    time.sleep(2)
    if (temperature > 0.7):
        print("high temperature")
    if ( humidity >0.7):
        print("high humidity")
    print("")
```

OUTPUT

Temperature: 0.81853
Humidity: 0.97255
high temperature
high humidity

Temperature: 0.15472
Humidity: 0.05986

Temperature: 0.62464
Humidity: 0.32342

Temperature: 0.83487
Humidity: 0.76008
high temperature
high humidity

Temperature: 0.14701
Humidity: 0.48039

Temperature: 0.79227
Humidity: 0.24788
high temperature

Temperature: 0.87672
Humidity: 0.33046
high temperature

Temperature: 0.67236
Humidity: 0.16511

Temperature: 0.14797
Humidity: 0.59022

Temperature: 0.51479
Humidity: 0.54463

Temperature: 0.25142
Humidity: 0.12738

Temperature: 0.17346
Humidity: 0.24678

Temperature: 0.37653
Humidity: 0.64490