#### 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**

```
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("high humidity")
```

#### **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