

# TEMPERATURE AND HUMIDITY DETECTING USING PYTHON PROGRAM

**Submitted by**

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## CODE:

```
import random

for i in range(0,15):

    temp=random.randint(22,100)

    hum=random.randint(60,100)

    if temp > 80 and hum < 90 :

        print("HIGH TEMPERATURE ",temp)

    elif hum > 90 and temp > 80 :

        print("HAZARD DETECTED WITH TEMPERATURE : %i AND HUMIDITY : %i" %(temp,hum))

    elif hum >90 and temp <80 :

        print("HIGH HUMIDITY : ",hum)

    else:

        print("ALL GOOD")
```

## Explanation :

Random function is used to generate the integer value of temperature and humidity within the given limit. A threshold value is set for humidity and temperature. If the value of temperature and humidity is high, then “HAZARD DETECTED” is printed with the value of temperature and humidity. Else “ALL GOOD” is printed. This process is detected with 15 different values of temperature and humidity using “for” loop.

# Output:

```
Python 3.8.0 Shell
File Edit Shell Debug Options Window Help
Python 3.8.0 (tags/v3.8.0:fa919fd, Oct 14 2019, 19:21:23) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/PRINCE/AppData/Local/Programs/Python/Python38-32/assignment2.py
HIGH TEMPERATURE 85
HIGH HUMIDITY : 92
HAZARD DETECTED WITH TEMPERATURE : 95 AND HUMIDITY : 100
HIGH TEMPERATURE 88
HIGH HUMIDITY : 92
HIGH HUMIDITY : 99
HIGH TEMPERATURE 89
HAZARD DETECTED WITH TEMPERATURE : 85 AND HUMIDITY : 95
HIGH TEMPERATURE 83
ALL GOOD
HIGH HUMIDITY : 97
HIGH TEMPERATURE 84
ALL GOOD
HIGH HUMIDITY : 95
HAZARD DETECTED WITH TEMPERATURE : 88 AND HUMIDITY : 95
>>>
```

Activate Windows  
Go to PC settings to activate Windows.

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