

## IBM Assignment-2

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Build a Python. Assume you get temperature and humidity values (generated with a random function to a variable) and write a condition to continuously detect the alarm in case of high temperature.

Code:

```
import random

for i in range(0,10):

    temp=random.randint(0,100)

    humid=random.randint(0,100)

    print("temperature level:"+str(temp))

    print("humidity level:"+str(humid))

    if(temp==range(27,38) and humid==range(30,50)):

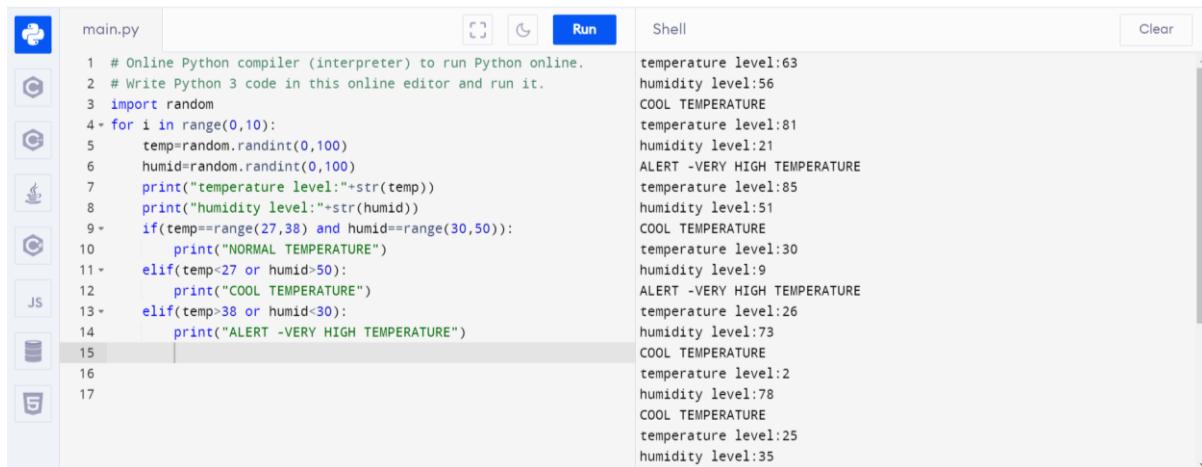
        print("NORMAL TEMPERATURE")

    elif(temp<27 or humid>50):

        print("COOL TEMPERATURE")

    elif(temp>38 or humid<30):

        print("ALERT -VERY HIGH TEMPERATURE")
```



The screenshot shows an online Python compiler interface. On the left, there's a file browser with 'main.py' selected. The code area contains the provided Python script. The 'Run' button is highlighted in blue. To the right, the 'Shell' window displays the execution results. The output shows 10 iterations of generating random temperature and humidity values and classifying them according to the given conditions. The results are as follows:

| Iteration | Temperature Range | Humidity Range | Classification  |
|-----------|-------------------|----------------|---|
| 1         | 27-38             | 30-50          | NORMAL TEMPERATURE  |
| 2         | 27-38             | 30-50          | COOL TEMPERATURE  |
| 3         | 27-38             | 30-50          | ALERT -VERY HIGH TEMPERATURE  |
| 4         | 27-38             | 30-50          | COOL TEMPERATURE  |
| 5         | 27-38             | 30-50          | temperature level:63<br>humidity level:56<br>COOL TEMPERATURE             |
| 6         | 27-38             | 30-50          | temperature level:81<br>humidity level:21<br>ALERT -VERY HIGH TEMPERATURE |
| 7         | 27-38             | 30-50          | temperature level:85<br>humidity level:51<br>COOL TEMPERATURE             |
| 8         | 27-38             | 30-50          | temperature level:30<br>humidity level:9<br>ALERT -VERY HIGH TEMPERATURE  |
| 9         | 27-38             | 30-50          | temperature level:26<br>humidity level:73<br>COOL TEMPERATURE             |
| 10        | 27-38             | 30-50          | temperature level:2<br>humidity level:78<br>COOL TEMPERATURE              |
| 11        | 27-38             | 30-50          | temperature level:25<br>humidity level:35<br>COOL TEMPERATURE             |