

Assignment -2
Python Programming

Assignment Date	07 November 2022
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Maximum Marks	2 Marks

Question-1:

Build a python code, Assume u 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.

Solution:

```
import random as rd
```

```
import time as t
```

```
while 1:
```

```
    temperature=rd.randint(0,100)
```

```
    moisture=rd.randint(0,100)
```

```
    if temperature>=60:
```

```
        print("warning!!Detected Temperature:"+str(temperature)+"*c")
```

```
    if moisture>=60:
```

```
        print("warning!!Detected Moisture:"+str(moisture)+"%")
```

```
    if temperature>=60 & moisture>=60:
```

```
        print("warning!!Detected both Temperature and Moisture:"+str(temperature)+"*c  
and"+str(moisture)+"%")
```

```
    elif temperature>=60 & moisture>=60:
```

```
        print("Both temperature and moisture are in normal condition")
```

```
    elif moisture<=60:
```

```
        print("normal moisture condition")
```

```
    elif temperature<=60:
```

```
        print("good temperature")
```

```
    t.sleep(1)
```

```
File Edit Format Run Options Window Help
import random as rd
import time as t
while 1:
    temperature=rd.randint(0,100)
    moisture=rd.randint(0,100)
    if temperature>=60:
        print("warning!!Detected Temperature:"+str(temperature)+"°c")
        if moisture>=60:
            print("warning!!Detected Moisture:"+str(moisture)+"%")
            if temperature>=60 & moisture>=60:
                print("warning!!Detected both Temperature and Moisture:"+str(temperature)+"°c and"+str(moisture)+"%")
            elif temperature>=60 & moisture<60:
                print("Both temperature and moisture are in normal condition")
        elif moisture<60:
            print("normal moisture condition")
    elif temperature<60:
        print("good temperature")
        t.sleep(1)
```

Output

```
*IDLE Shell 3.10.6*
File Edit Shell Debug Options Window Help
warning!!Detected Temperature:84°c
warning!!Detected Moisture:62%
warning!!Detected both Temperature and Moisture:84°c and62%
good temperature
warning!!Detected Temperature:84°c
warning!!Detected Moisture:73%
good temperature
warning!!Detected Temperature:65°c
warning!!Detected Moisture:98%
good temperature
warning!!Detected Temperature:91°c
normal moisture condition
warning!!Detected Temperature:82°c
normal moisture condition
warning!!Detected Temperature:93°c
normal moisture condition
warning!!Detected Temperature:100°c
warning!!Detected Moisture:75%
good temperature
warning!!Detected Temperature:60°c
warning!!Detected Moisture:83%
warning!!Detected Temperature:77°c
normal moisture condition
good temperature
warning!!Detected Temperature:83°c
normal moisture condition
good temperature
warning!!Detected Temperature:88°c
normal moisture condition
good temperature
warning!!Detected Temperature:76°c
warning!!Detected Moisture:100%
warning!!Detected Temperature:78°c
normal moisture condition
warning!!Detected Temperature:91°c
warning!!Detected Moisture:94%
warning!!Detected Temperature:64°c
normal moisture condition
good temperature
good temperature
warning!!Detected Temperature:70°c
normal moisture condition
warning!!Detected Temperature:61°c
normal moisture condition
good temperature
good temperature
```