

Assignment -2
Python Programming

Assignment Date	27 September 2022
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Maximum Marks	2 Marks

Question-1:

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.

Solution:

```
import random
```

```
def temperature():  
    value=random.randint(25,100)  
    #print(value)  
    return value
```

```
t=temperature()
```

```
def humidity():  
    range=random.randint(40,100)  
    #print(range)  
    return range
```

```
h=humidity()
```

```
#for temperature
```

```
if t>30:  
    print("High temperature detetcted")  
elif t==30:  
    print("Temperature reached maximum threshold of 30 degrees celsius")
```

```
else:  
    print("Temperature is good")
```

```
#for Humidity
```

```
if h>65 :  
    print("High humidity detetcted")  
elif t == 65:  
    print("Humidity reached maximum threshold of 65 percent")  
else:  
    print("Humidity is good")
```

The screenshot displays the PyCharm IDE interface. The top pane shows a Python script named `main.py` with the following code:

```
1 import random
2 def temperature():
3     value = random.randint(25, 100)
4     # print(value)
5     return value
6 t = temperature()
7
8 def humidity():
9     range = random.randint(40, 100)
10    # print(range)
11    return range
12 h = humidity()
13 # for temperature
14 if t > 30:
15     print("High temperature detected")
16 elif t == 30:
17     print("Temperature reached maximum threshold of 30 degrees celsius")
18
19 else:
20     print("Temperature is good")
21 # for Humidity
22
23 if h > 65:
24     print("High humidity detected")
25 elif t == 65:
26     print("Humidity reached maximum threshold of 65 percent")
```

The bottom pane shows the output of the script execution:

```
C:\Users\welcome\PycharmProjects\pythonProject\venv\Scripts
High temperature detected
Humidity is good

Process finished with exit code 0
```

The bottom status bar includes tabs for Run, TODO, Problems, Terminal, Python Packages, and Python Console.