

ASSIGNMENT -2
PYTHON PROGRAMING

Assignment Date	26 september 2022
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Maximum Marks	2 Marks

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.

SOFTWARE USED:

Online GDB

CODE:

```
import random
import time
while True:
    temperature = random.randrange(1, 100, 1) #temperature generates randomly
    humidity = random.randrange(1, 100, 1) # humidity generates randomly
    if temperature > 60:
        print("High temperature Detected ==> " + str(temperature) + u"\N{DEGREE SIGN}C = 'ALARM  ON'");
    else:
        print("Normal temperature Detected ==> " + str(temperature) + u"\N{DEGREE SIGN}C = 'ALARM OFF'");
    break
time.sleep(2.0) # for time delay of 2 sec for every loop
```

CODE AND OUTPUT:

	main.py	Shell
1	<code>import random</code>	High temperature Detected ==> 83°C = 'ALARM ON'
2	<code>import time</code>	High temperature Detected ==> 97°C = 'ALARM ON'
3		High temperature Detected ==> 69°C = 'ALARM ON'
4	<code>while True:</code>	High temperature Detected ==> 81°C = 'ALARM ON'
5	<code> temperature = random.randrange(1, 100, 1) #temperature generates randomly</code>	Normal temperature Detected ==> 23°C = 'ALARM OFF'
6	<code> humidity = random.randrange(1, 100, 1) # humidity generates randomly</code>	>
7	<code> if temperature > 60:</code>	
8	<code> print("High temperature Detected ==> " + str(temperature) + u"\N{DEGREE SIGN}C = 'ALARM ON'")</code>	
9	<code> else:</code>	
10	<code> print("Normal temperature Detected ==> " + str(temperature) + u"\N{DEGREE SIGN}C = 'ALARM OFF'")</code>	
11	<code> break</code>	
12	<code> time.sleep(2.0) # for time delay of 2 sec for every loop</code>	