

ASSIGNMENT -2

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Topic: Assignment on temperature and humidity sensing and alarm automation using python

Code:

```
from random import randint
```

```
def generating_tempvalue():
```

```
    return randint(1,150)
```

```
def generating_humidityvalue():
```

```
    return randint(1,150)
```

```
random_tempvalue = generating_tempvalue()
```

```
print("The value of temperature is:",random_tempvalue)
```

```
random_humidityvalue = generating_humidityvalue()
```

```
print("The value of humidity is:",random_humidityvalue)
```

```
if random_tempvalue>80:
```

```
    print("High temperature detected")
```

```
    if random_humidityvalue>90:
```

```
        print("High humidity\n*****ALERT SIGNAL*****")
```

```
    else:
```

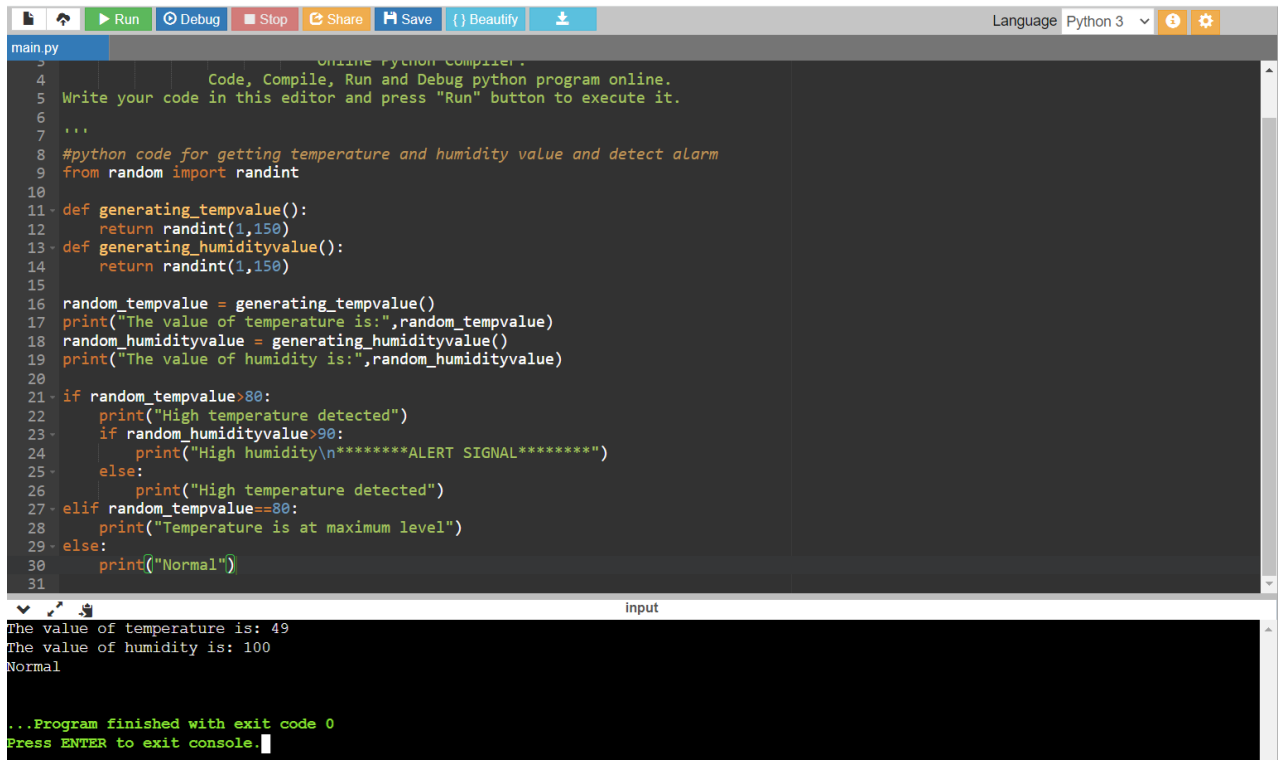
```
        print("High temperature detected")
```

```
elif random_tempvalue==80:
```

```
print("Temperature is at maximum level")

else:

    print("Normal")
```



The screenshot shows an online Python compiler interface. The top bar includes buttons for Run, Debug, Stop, Share, Save, and Beautify, along with a Language dropdown set to Python 3. The main editor area contains a Python script named 'main.py' with the following code:

```
3 Online Python Compiler .
4 Code, Compile, Run and Debug python program online.
5 Write your code in this editor and press "Run" button to execute it.
6
7 """
8 #python code for getting temperature and humidity value and detect alarm
9 from random import randint
10
11 def generating_tempvalue():
12     return randint(1,150)
13 def generating_humidityvalue():
14     return randint(1,150)
15
16 random_tempvalue = generating_tempvalue()
17 print("The value of temperature is:",random_tempvalue)
18 random_humidityvalue = generating_humidityvalue()
19 print("The value of humidity is:",random_humidityvalue)
20
21 if random_tempvalue>80:
22     print("High temperature detected")
23     if random_humidityvalue>90:
24         print("High humidity\n*****ALERT SIGNAL*****")
25     else:
26         print("High temperature detected")
27 elif random_tempvalue==80:
28     print("Temperature is at maximum level")
29 else:
30     print("Normal")
31
```

Below the editor, the output console shows the results of the program execution:

```
input
The value of temperature is: 49
The value of humidity is: 100
Normal

...Program finished with exit code 0
Press ENTER to exit console.
```

OUTPUT: