

IBM IOT Assignment -2

Python Programming

Assignment Date	24 September 2022
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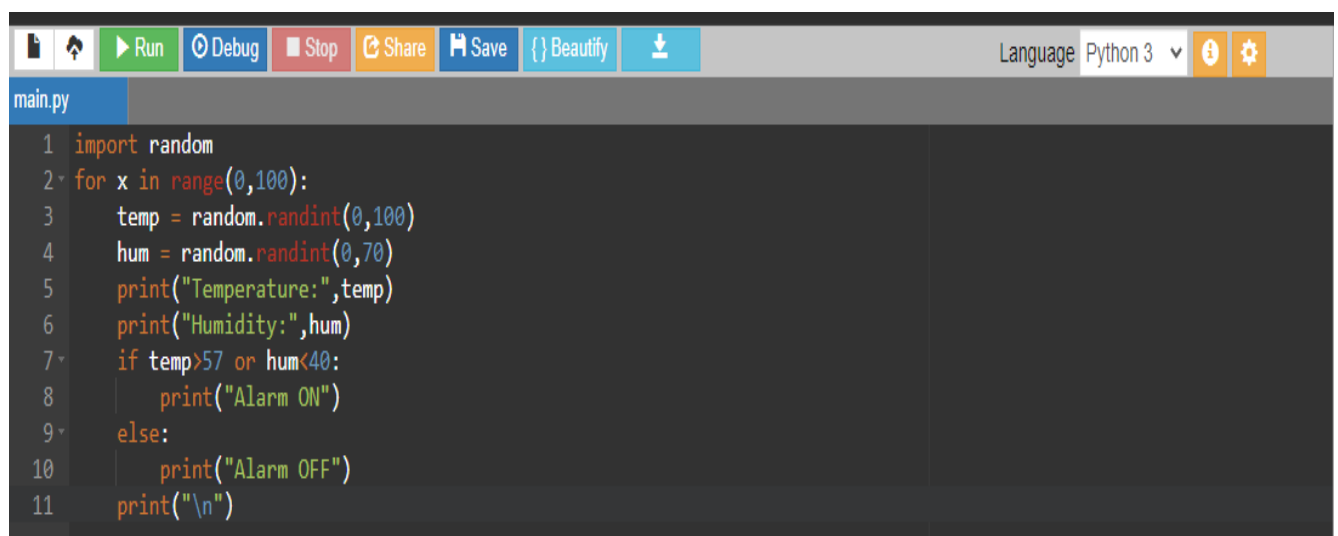
Question-1:

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

Code:

```
import random

for x in range(0,100):
    temp = random.randint(0,100)
    hum = random.randint(0,70)
    print("Temperature:",temp)
    print("Humidity:",hum)
    if temp>57 or hum<40:
        print("Alarm ON")
    else:
        print("Alarm OFF")
    print("\n")
```



The image shows a screenshot of a Python IDE interface. At the top, there is a toolbar with icons for file operations, running, debugging, and saving. The language is set to Python 3. The main editor window displays a Python script named 'main.py'. The script generates random temperature and humidity values and checks if an alarm should be triggered based on specific thresholds.

```
1 import random
2 for x in range(0,100):
3     temp = random.randint(0,100)
4     hum = random.randint(0,70)
5     print("Temperature:",temp)
6     print("Humidity:",hum)
7     if temp>57 or hum<40:
8         print("Alarm ON")
9     else:
10        print("Alarm OFF")
11    print("\n")
```

Output:

```
input
Temperature: 72
Humidity: 52
Alarm ON

Temperature: 87
Humidity: 31
Alarm ON

Temperature: 17
Humidity: 39
Alarm ON

Temperature: 11
Humidity: 67
Alarm OFF

Temperature: 37
Humidity: 38
Alarm ON

Temperature: 91
Humidity: 0
Alarm ON

Temperature: 34
Humidity: 28
Alarm ON
```