

**Assignment 2**  
**Python program**

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```
import random #random function

temp=random.randint(1,100)

humty=random.randint(1,100)

print(temp)#temperature value

print(humty)#humidity value

if((temp<30)&(humty<50)):

    print("temperature is normal:")

    print("humidity is normal:")

    print("alarm off")

elif((temp<30)&(humty>50)):

    print("temperature is low")

    print("humidity is high")

    print("alarm off")

elif((temp>30)&(humty<50)):

    print("temperature is high:")

    print("humidity is normal")

    print("alarm on")

elif((temp>30)&(humty<60)):

    print("temperature is high")

    print("humidity is normal:")

    print("alarm is on")

elif((temp>30)&(humty>60)):

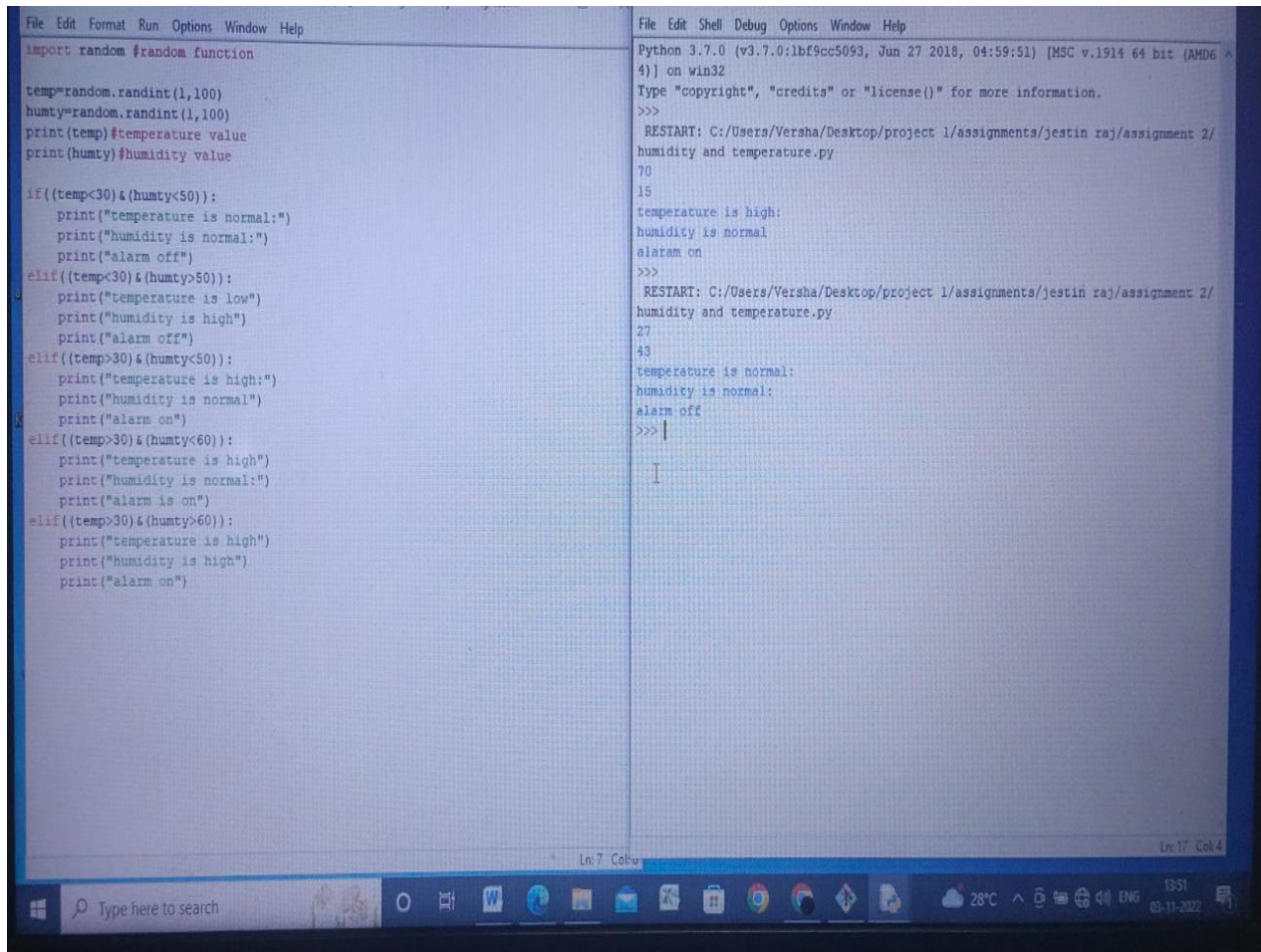
    print("temperature is high")

    print("humidity is high")

    print("alarm on")
```

## Assignment 2

### Python program



The image shows a screenshot of a Python IDE with two windows. The left window displays a Python script for monitoring temperature and humidity. The script uses the `random` module to generate random values for `temp` and `humty` (sic) between 1 and 100. It then uses a series of `if` and `elif` statements to check the conditions and print the status of temperature, humidity, and the alarm.

```
import random #random function

temp=random.randint(1,100)
humty=random.randint(1,100)
print(temp)#temperature value
print(humty)#humidity value

if((temp<30)&(humty<50)):
    print("temperature is normal:")
    print("humidity is normal:")
    print("alarm off")
elif((temp<30)&(humty>50)):
    print("temperature is low")
    print("humidity is high")
    print("alarm on")
elif((temp>30)&(humty<50)):
    print("temperature is high:")
    print("humidity is normal")
    print("alarm on")
elif((temp>30)&(humty>60)):
    print("temperature is high")
    print("humidity is normal:")
    print("alarm is on")
elif((temp>30)&(humty>60)):
    print("temperature is high")
    print("humidity is high")
    print("alarm on")
```

The right window shows the Python 3.7.0 shell output. It displays the restart command, the file path, and the execution of the script. The output shows the random values for temperature and humidity, and the resulting status messages.

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/Versha/Desktop/project 1/assignments/jestin raj/assignment 2/humidity and temperature.py
70
15
temperature is high:
humidity is normal
alarm on
>>>
RESTART: C:/Users/Versha/Desktop/project 1/assignments/jestin raj/assignment 2/humidity and temperature.py
27
43
temperature is normal:
humidity is normal:
alarm off
>>> |
```

The taskbar at the bottom shows the Windows operating system with various application icons and a search bar.