

Assignment -2

BATCH NO :B9-3A5E

Assignment Date	29 September 2022
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Python code

```
import random
x=random.randint (1,100)
y=random.randint (1,50)
print("random temperature and humidity reading")
if( (x<50) & (y<30)) :
    print ("temperature is normal:",x,"%")
    print ("humidity is normal:",y,"%")
    print ("Alarm Off")
elif( (x<50) & (y>30)):
    print("temperature is low:",x,"%")
    print ("humidity is high:",y,"%")
    print("Alarm Off")
elif( (x>50) & (y<30)) :
    print("temperature is high:",x,"%")
    print ("humidity is high:",y,"%")
    print ("Alarm On")
elif( (x>50) & (y>30)):
    print("temperature is high:",x,"%")
    print ("humidity is low:",y,"%")
```

```
print ("Alarm On")
```

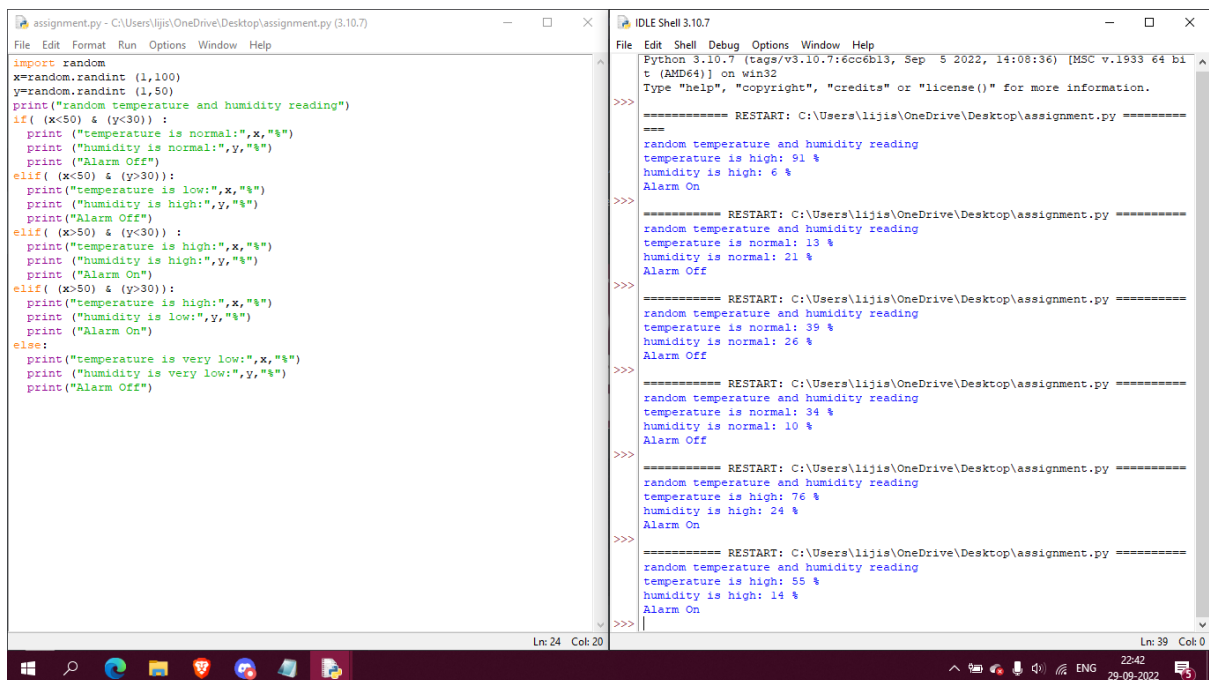
else:

```
print("temperature is very low:",x,"%")
```

```
print ("humidity is very low:",y,"%")
```

```
print("Alarm Off")
```

Output



The screenshot displays a Python IDE with two windows. The left window, titled 'assignment.py - C:\Users\lijie\OneDrive\Desktop\assignment.py (3.10.7)', contains the following code:

```
import random
x=random.randint(1,100)
y=random.randint(1,50)
print("random temperature and humidity reading")
if ( (x<50) & (y<30)) :
    print ("temperature is normal:",x,"%")
    print ("humidity is normal:",y,"%")
    print ("Alarm Off")
elif( (x<50) & (y>30)):
    print("temperature is low:",x,"%")
    print ("humidity is high:",y,"%")
    print("Alarm Off")
elif( (x>50) & (y<30)) :
    print("temperature is high:",x,"%")
    print ("humidity is high:",y,"%")
    print ("Alarm On")
elif( (x>50) & (y>30)):
    print("temperature is high:",x,"%")
    print ("humidity is low:",y,"%")
    print ("Alarm On")
else:
    print("temperature is very low:",x,"%")
    print ("humidity is very low:",y,"%")
    print("Alarm Off")
```

The right window, titled 'IDLE Shell 3.10.7', shows the output of the script after multiple restarts. Each restart is indicated by a separator line. The output for each restart is as follows:

- Restart 1: random temperature and humidity reading, temperature is high: 91 %, humidity is high: 6 %, Alarm On
- Restart 2: random temperature and humidity reading, temperature is normal: 13 %, humidity is normal: 21 %, Alarm Off
- Restart 3: random temperature and humidity reading, temperature is normal: 39 %, humidity is normal: 26 %, Alarm Off
- Restart 4: random temperature and humidity reading, temperature is normal: 34 %, humidity is normal: 10 %, Alarm Off
- Restart 5: random temperature and humidity reading, temperature is high: 76 %, humidity is high: 24 %, Alarm On
- Restart 6: random temperature and humidity reading, temperature is high: 55 %, humidity is high: 14 %, Alarm On

The taskbar at the bottom shows the system clock as 22:42 on 29-09-2022.