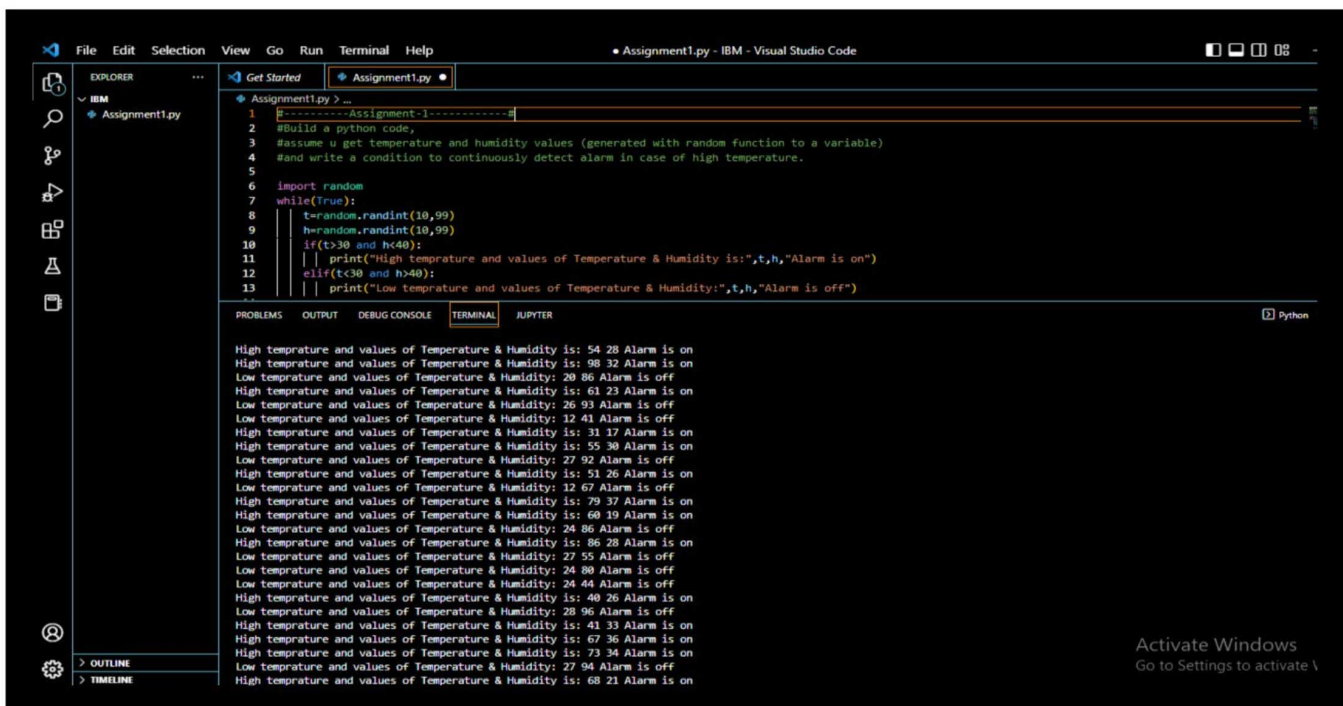


### Question-1:

Build a python code, assume u 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.

### Solution:

```
import random
while(True):
    t=random.randint(10,99)
    h=random.randint(10,99)
    if(t>30 and h<40):
        print("High temperature and values of Temperature & Humidity is:", t, h, "Alarm is on")
    elif(t<30 and h>40):
        print("Low temperature and values of Temperature &Humidity:", t, h, "Alarm is off")
```



The screenshot shows the Visual Studio Code interface with a Python file named 'Assignment1.py' open. The code in the editor is as follows:

```
1 #-----Assignment-1-----#
2 #Build a python code,
3 #assume u get temperature and humidity values (generated with random function to a variable)
4 #and write a condition to continuously detect alarm in case of high temperature.
5
6 import random
7 while(True):
8     t=random.randint(10,99)
9     h=random.randint(10,99)
10    if(t>30 and h<40):
11        | print("High temperature and values of Temperature & Humidity is:",t,h,"Alarm is on")
12    elif(t<30 and h>40):
13        | print("Low temprature and values of Temperature &Humidity:",t,h,"Alarm is off")
```

The terminal output shows the execution of the code, displaying alternating messages for high and low temperature/humidity conditions:

```
High temperature and values of Temperature & Humidity is: 54 28 Alarm is on
High temperature and values of Temperature & Humidity is: 98 32 Alarm is on
Low temprature and values of Temperature & Humidity: 20 86 Alarm is off
High temperature and values of Temperature & Humidity is: 61 23 Alarm is on
Low temprature and values of Temperature & Humidity: 26 93 Alarm is off
Low temprature and values of Temperature & Humidity: 12 41 Alarm is off
High temperature and values of Temperature & Humidity is: 31 17 Alarm is on
High temperature and values of Temperature & Humidity is: 55 30 Alarm is on
Low temprature and values of Temperature & Humidity: 27 92 Alarm is off
High temperature and values of Temperature & Humidity is: 51 26 Alarm is on
Low temprature and values of Temperature & Humidity: 12 67 Alarm is off
High temperature and values of Temperature & Humidity is: 79 37 Alarm is on
High temperature and values of Temperature & Humidity is: 60 19 Alarm is on
Low temprature and values of Temperature & Humidity: 24 86 Alarm is off
High temperature and values of Temperature & Humidity is: 86 28 Alarm is on
Low temprature and values of Temperature & Humidity: 27 55 Alarm is off
Low temprature and values of Temperature & Humidity: 24 89 Alarm is off
Low temprature and values of Temperature & Humidity: 24 46 Alarm is off
High temperature and values of Temperature & Humidity is: 40 26 Alarm is on
Low temprature and values of Temperature & Humidity: 28 96 Alarm is off
High temperature and values of Temperature & Humidity is: 41 33 Alarm is on
High temperature and values of Temperature & Humidity is: 67 36 Alarm is on
High temperature and values of Temperature & Humidity is: 73 34 Alarm is on
Low temprature and values of Temperature & Humidity: 27 94 Alarm is off
High temperature and values of Temperature & Humidity is: 68 21 Alarm is on
```

An 'Activate Windows' watermark is visible in the bottom right corner of the terminal area.