

ASSIGNMENT – 2

PYTHON PROGRAMMING

ASSIGNMENT DATE	13 OCTOBER 2022
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MAXIMUM MARKS	2 MARKS

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)
```

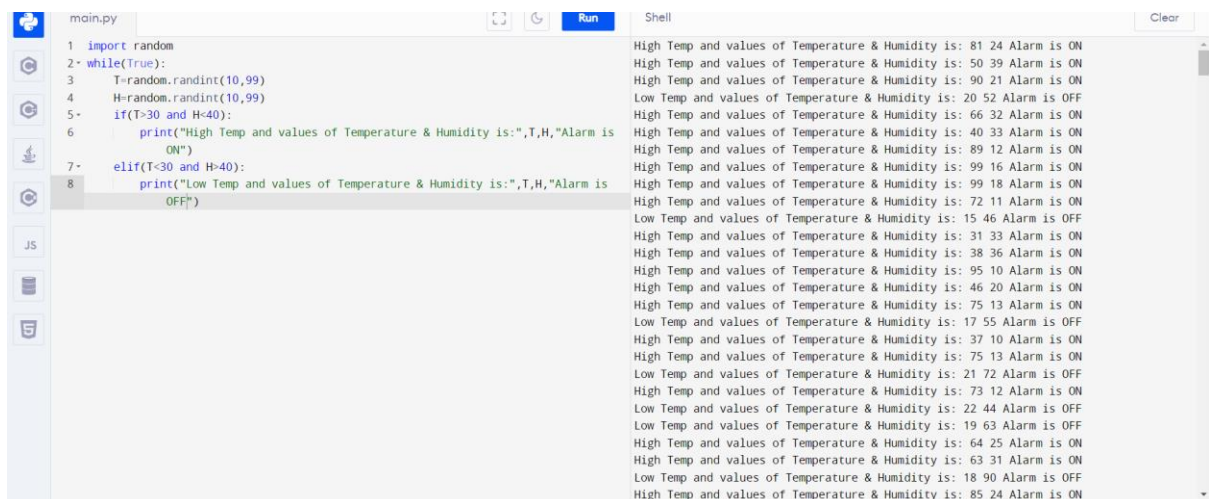
```
    H=random.randint(10,99)
```

```
    if(T>30 and H<40):
```

```
        print("High Temp and Values of Temperature & Humidity is:",T,H,"Alarm is ON")
```

```
    elif(T<30 and H>40):
```

```
        print("Low Temp and Values of Temperature & Humidity is: ",T,H,"Alarm is OFF")
```



The screenshot shows a Python IDE with a file named 'main.py'. The code in the editor is as follows:

```
1 import random
2 while(True):
3     T=random.randint(10,99)
4     H=random.randint(10,99)
5     if(T>30 and H<40):
6         print("High Temp and values of Temperature & Humidity is:",T,H,"Alarm is ON")
7     elif(T<30 and H>40):
8         print("Low Temp and values of Temperature & Humidity is:",T,H,"Alarm is OFF")
```

The output window on the right shows the following results:

```
High Temp and values of Temperature & Humidity is: 81 24 Alarm is ON
High Temp and values of Temperature & Humidity is: 50 39 Alarm is ON
High Temp and values of Temperature & Humidity is: 90 21 Alarm is ON
Low Temp and values of Temperature & Humidity is: 20 52 Alarm is OFF
High Temp and values of Temperature & Humidity is: 66 32 Alarm is ON
High Temp and values of Temperature & Humidity is: 40 33 Alarm is ON
High Temp and values of Temperature & Humidity is: 89 12 Alarm is ON
High Temp and values of Temperature & Humidity is: 99 16 Alarm is ON
High Temp and values of Temperature & Humidity is: 99 18 Alarm is ON
High Temp and values of Temperature & Humidity is: 72 11 Alarm is ON
Low Temp and values of Temperature & Humidity is: 15 46 Alarm is OFF
High Temp and values of Temperature & Humidity is: 31 33 Alarm is ON
High Temp and values of Temperature & Humidity is: 38 36 Alarm is ON
High Temp and values of Temperature & Humidity is: 95 10 Alarm is ON
High Temp and values of Temperature & Humidity is: 46 20 Alarm is ON
High Temp and values of Temperature & Humidity is: 75 13 Alarm is ON
Low Temp and values of Temperature & Humidity is: 17 55 Alarm is OFF
High Temp and values of Temperature & Humidity is: 37 10 Alarm is ON
High Temp and values of Temperature & Humidity is: 75 13 Alarm is ON
Low Temp and values of Temperature & Humidity is: 21 72 Alarm is OFF
High Temp and values of Temperature & Humidity is: 73 12 Alarm is ON
Low Temp and values of Temperature & Humidity is: 22 44 Alarm is OFF
Low Temp and values of Temperature & Humidity is: 19 63 Alarm is OFF
High Temp and values of Temperature & Humidity is: 64 25 Alarm is ON
High Temp and values of Temperature & Humidity is: 63 31 Alarm is ON
Low Temp and values of Temperature & Humidity is: 18 90 Alarm is OFF
High Temp and values of Temperature & Humidity is: 85 24 Alarm is ON
```