

BUILD A PYTHON CODE ,ASSUME U GET TEMPERATURE AND HUMIDITY VALUES AND WRITE A CONDITION TO CONTINUOUSLY DETECT ALARM IN CASE OF HIGH TEMPERATURE

PROGRAM:

```
#from machine import Pin
import random
import time
#btn=Pin(4,Pin.IN) while
True:

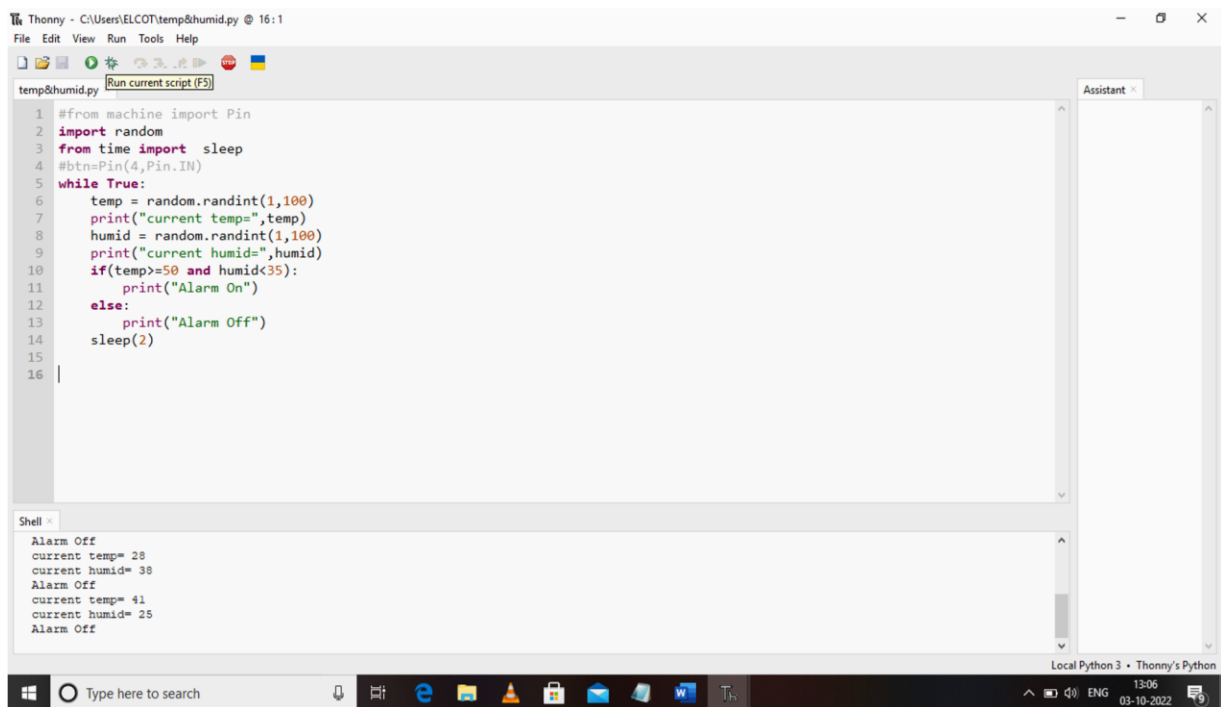
    temp = random.randint(1,100)
    print("current temp=",temp)    humid
    = random.randint(1,100)
    print("current humid=",humid)
    if(temp>=50 and humid<35):

        print("Alarm On")
    else:
```

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

```
sleep(2)
```

OUTPUT :



The screenshot shows the Thonny Python IDE interface. The main editor window displays a Python script named 'temp&humid.py'. The script imports 'Pin' from 'machine', 'random' from 'random', and 'sleep' from 'time'. It sets a button pin (4) to input mode. A while loop runs indefinitely, generating random temperature and humidity values. If the temperature is greater than or equal to 50 and the humidity is less than 35, it prints 'Alarm On'. Otherwise, it prints 'Alarm Off' and sleeps for 2 seconds. The Shell window at the bottom shows the output of the script, displaying 'Alarm Off' and 'current temp=' followed by random values (28, 41, 25) and 'current humid=' followed by random values (38, 25).

```
1 #from machine import Pin
2 import random
3 from time import sleep
4 #btn=Pin(4,Pin.IN)
5 while True:
6     temp = random.randint(1,100)
7     print("current temp=",temp)
8     humid = random.randint(1,100)
9     print("current humid=",humid)
10    if(temp>=50 and humid<35):
11        print("Alarm On")
12    else:
13        print("Alarm Off")
14        sleep(2)
15
16
```

Shell

```
Alarm Off
current temp= 28
current humid= 38
Alarm Off
current temp= 41
current humid= 25
Alarm Off
```