

RMK ENGINEERING COLLEGE  
KAVARAIPETTAI  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
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ASSIGNMENT-2

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SURENDAR T

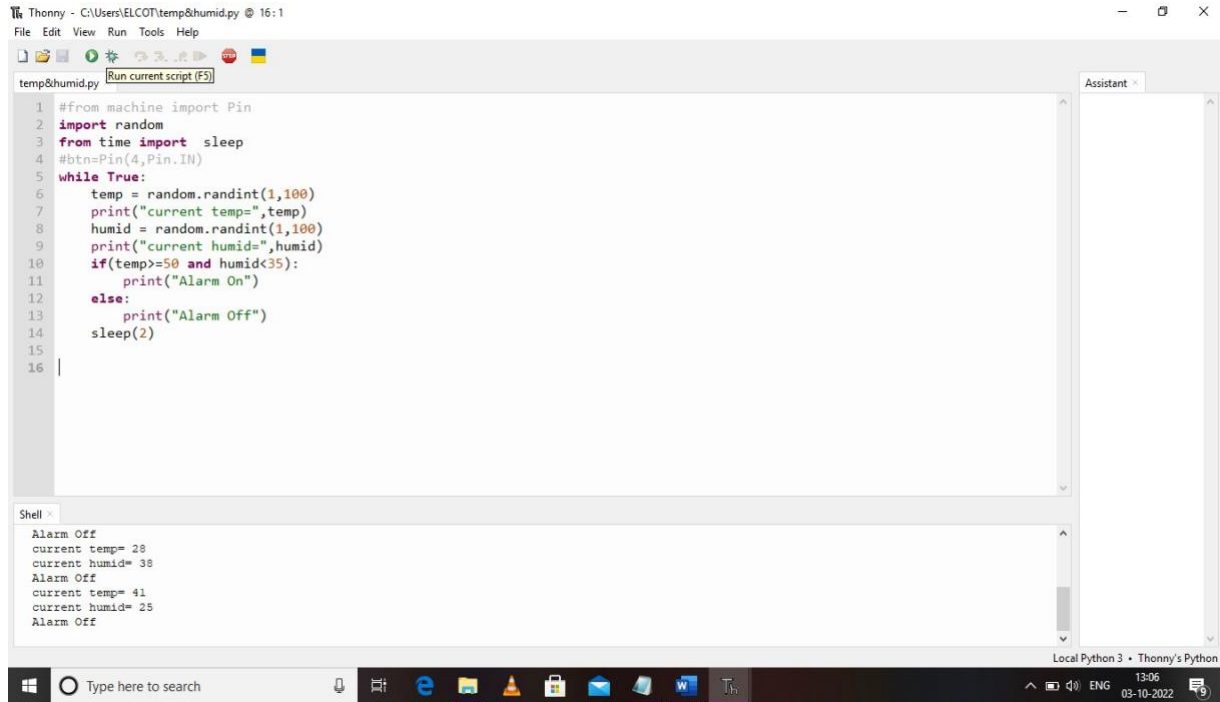
SHANDRU G

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
import sleep
#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 the 'Pin' module from 'machine', 'random' from 'random', and 'sleep' from 'time'. It initializes a button 'btn' on pin 4. A 'while True' loop generates random temperature and humidity values, prints them, and checks if the temperature is greater than or equal to 50 and humidity is less than 35. If true, it prints 'Alarm On'; otherwise, it prints 'Alarm Off' and sleeps for 2 seconds.

```
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
```

The Shell window at the bottom shows the output of the script:

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

The Windows taskbar at the bottom shows the system clock as 13:06 on 03-10-2022, and the language is set to ENG.